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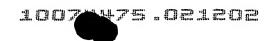
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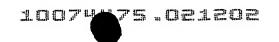
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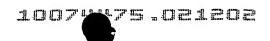


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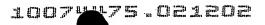
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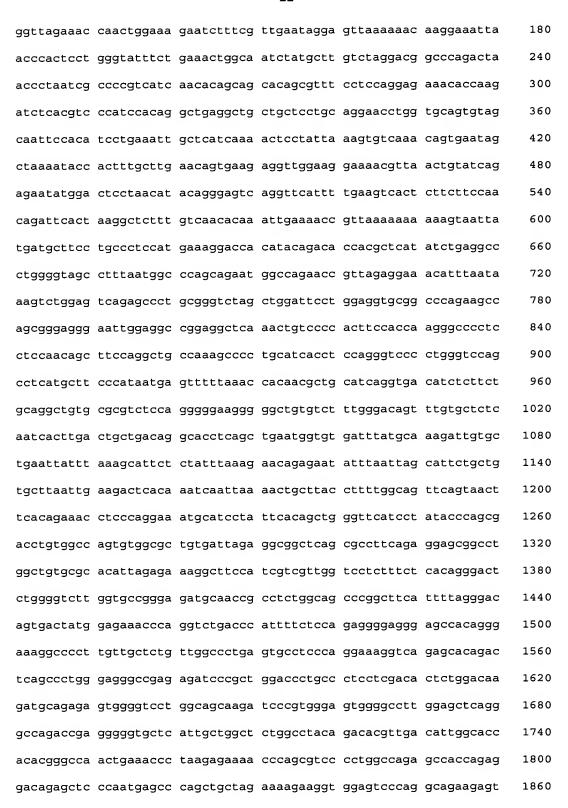
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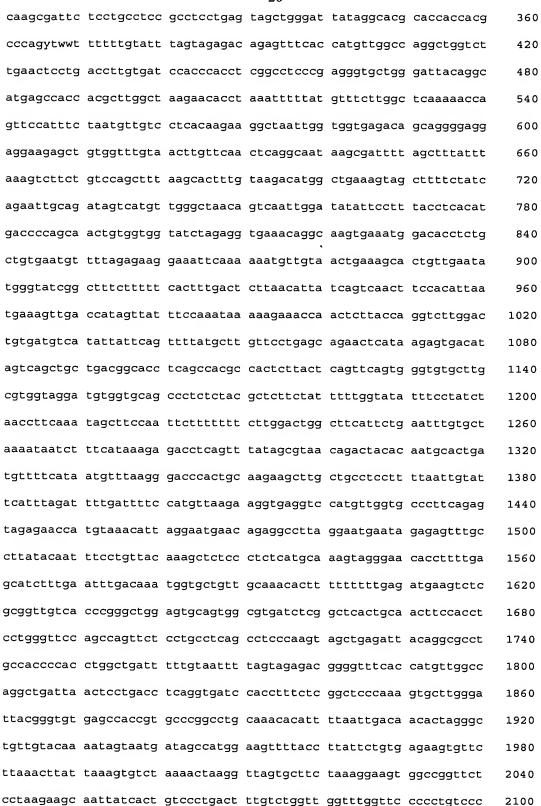
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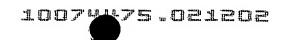




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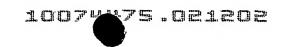
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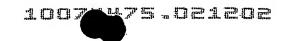
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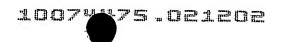
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<213> Homo sapien

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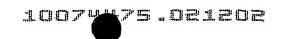
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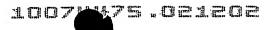
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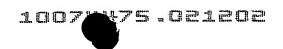


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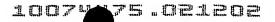
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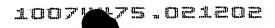


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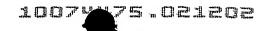


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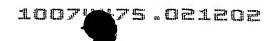
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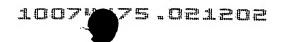
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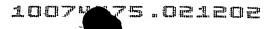
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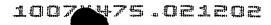


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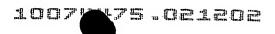
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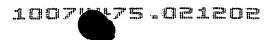


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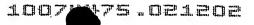
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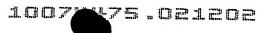
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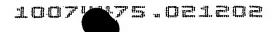


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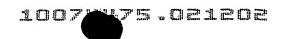


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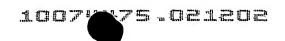
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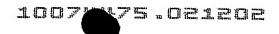


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<211> 682 <212> DNA <213> Homo <400> 171 gaaaaggttg agcaatacct ttttacataa taccttgaaa gtccaaaata ttaattatct atacctttat ctcgctctgt cttccttccg	gcagcaggtg aaatccgtga ttattggtca tacaggttgt atgaattgat tgaacccaca tgatgcttga cacccaggct	tatcatcaga gaattattct acaaaaaata ttcccagtat tatttaaata gttgcccact ggagtgcagg gcagattctc	ggttgcaaaa gcaaatagct ggataaatgc cctctaaagg tacgtagtat tttttctttt ggcgtcatct ctgtgcctta	tgatgagatt tctctttaac ttgtttttt taaccaggga gctacaaacc ttttttttg ttgactcact cagcctccga	caggttttt agtattcggt atttagcaat tttttttat attgcagtta gagacagagc tgcaaccttc gtttggctgg	120 180 240 300 360 420 480
<211> 682 <212> DNA <213> Homo <400> 171 gaaaaggttg agcaatacct ttttacataa taccttgaaa gtccaaaata ttaattatct atacctttat ctcgctctgt cttccttccg gatttacagg	gcagcaggtg aaatccgtga ttattggtca tacaggttgt atgaattgat tgaacccaca tgatgcttga cacccaggct tggggtgcag	tatcatcaga gaattattct acaaaaaata ttcccagtat tatttaaata gttgcccact ggagtgcagg gcagattctc aagtttccca	ggttgcaaaa gcaaatagct ggataaatgc cctctaaagg tacgtagtat tttttctttt ggcgtcatct ctgtgcctta cattttcagt	tgatgagatt tctctttaac ttgtttttt taaccaggga gctacaaacc ttttttttg ttgactcact cagcctccga gagaaattcc	caggttttt agtattcggt atttagcaat tttttttat attgcagtta gagacagagc tgcaaccttc gtttggctgg tcaattggcc	120 180 240 300 360 420 480 540

<210> 172 <211> 75 <212> PRT <213> Homo sapien

<400> 172

Met Gly Pro Arg Ser Arg Leu Trp Pro Ser Ser Pro Leu Trp Leu Val 1 5 10 15

Gln Pro Leu Cys Thr Pro Gly Val Phe Thr Pro Gly Ala Asp Ser Ser 20 25 30

His Cys Ser Ser Phe Leu Arg Glu Ile Thr Val Val Ile Ala Ala Gly 35 40 45

Ala Asn Arg Leu Gly Leu Val Ser Cys Ala Phe Gly Gln Leu Leu Thr 50 60

Arg Ser Ser Leu Lys Gln Trp Gly Gly Pro His 65 70 75

<210> 173 <211> 38 <212> PRT <213> Homo sapien

<400> 173

Met Phe Pro Arg Leu Asp Ser Thr Ser Trp Pro Gln Gly Ile Leu Trp 1 5 10 15

Ala Trp Thr Pro Lys Pro Leu Arg Leu Glu Val Cys Glu Pro Pro Ser 20 25 30

Leu Pro Ser Leu Trp Ser 35

<210> 174 <211> 52 <212> PRT <213> Homo sapien <400> 174

Met Thr Leu Phe Ile Arg Cys Cys Thr Asn Tyr Gly Asn Leu Cys Gln 1 $$ 5 $$ 10 $$ 15

Tyr Phe Asn Val Cys Trp Ile Ile Thr Asp Ile Phe Ile Ile Leu Met 25

Ser Thr Asn Leu Phe Ile Leu Ile Ala Arg Val Ser Leu Gly Ser Lys

His His Leu Gly 50

<210> 175

<211> 37

<212> PRT

<213> Homo sapien

<400> 175

Met Ala Gly Ser Gly Lys Val Pro Ile Thr Thr Tyr Lys Pro Pro 5 10

Thr Asn Ser Asn Ala Ile His Leu Pro Thr Pro Ile Ile Arg Lys Ala

Gly Phe Thr Gly Ile 35

<210> 176 <211> 88 <212> PRT

<213> Homo sapien

<400> 176

Met Gly Leu Thr Leu Lys Ser Leu Cys Asp Ser Lys Met Asn Cys Gln 10

Ser Asn Val Pro Leu Met Lys Asp Pro Ile Thr Leu Gln His Val Cys 20 25

Ile Gln Arg Thr Tyr Leu Arg Leu Ser Phe Gly His Gly Gly Arg Leu 35

Leu Leu Lys Thr Tyr Gln Ser Pro Leu Trp Arg Ser Ala Asp Arg Pro 50 55

His Asp Leu Gly Asn Gly Leu Leu Val Ile Trp Asp Cys Leu Gly Leu 65 70 75

Cys Asn Gly Thr Trp Gly Gln Asn

85

<210> 177

<211> 61

<212> PRT

<213> Homo sapien

<400> 177

Met Asp His Lys Ser Ala Asn His Ser Ser Ala Leu Leu Lys Met Leu 1 5 10 15

Leu Ala Gly Gly Met Ser Leu Pro Glu Val Pro Glu Gly Leu Thr Pro 20 25 30

Thr Pro Ser Ser Gln Thr His Leu Ser Lys Gly Lys Gly Arg Asn Leu 35 40 45

Glu Lys Ser Tyr Phe His Asn His Ser Leu Arg Glu Pro 50 55 60

<210> 178

<211> 198

<212> PRT

<213> Homo sapien

<400> 178

2 (2)

Met Thr Pro Ile His Leu Ile Cys Ser Pro Ser His Glu Leu Gln Asp 1 5 10 15

Thr Thr His Pro Gln Pro Gln Arg Glu Cys Gln Arg Phe Ser Thr His 20 25 30

Gly Ala Gln Thr Thr Gln Cys Ala Thr His His His Pro Tyr Ile Ser 35 40 45

Gly Ala Ala Thr Arg Thr Tyr Leu Arg His Val Ala Pro Asp Tyr Ser 50 60

Ala Pro Leu Met Ala Pro Pro Thr Asn Thr Arg Leu Ala Pro Ala Ser 65 . 70 . 75 . 80

Leu Gln Pro Thr His Leu Arg Pro Pro Leu Ala Arg His Pro Leu Thr 85 90 95

Ala Asp Cys Arg Thr His Gln Leu Thr Asp Thr Arg Pro Leu His Pro 100 105 110

Arg Pro Ile Thr Ser Arg Thr Pro Gln Pro Leu Pro Ser His Thr His 120 115

Gly Leu His His Thr Arg Pro Pro His Thr Ala Thr Gly Cys Pro Tyr 135 140

Leu Ser Thr Ser Arg Pro Leu Pro Pro Leu His Thr Arg Ser Ile His 150 155

Pro Asp Asn Pro His Cys Thr Thr Pro His His Ser Pro Ser Lys Pro 170

Ser Thr Thr His Gln Gln Ser Pro Ala Pro Thr Pro Asn Lys Pro 180 185

His Pro Arg Arg Ala Ser 195

<210> 179

<211> 20

<212> PRT

<213> Homo sapien

<400> 179

Met Ile Gly Ile Thr Trp Cys Phe Glu Leu Ile His Pro Thr Leu Glu 10

Leu Thr Ala Thr

<210> 180 <211> 107 <212> PRT <213> Homo sapien

<400> 180

Met Gly Ala Ser Gly Pro Glu Arg Glu Asp Arg Asn Ser Glu Asn Gly 5

Val Glu Lys Lys Asn Val Lys Glu Leu His Glu Glu His Met Ala Glu 20

Lys Lys Glu Leu Gln Glu Glu Asn Gln Arg Leu Gln Gly Leu Pro Val 3.5 4.0



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141

Ser Gly Ser Glu Glu Gly Arg Leu Pro Val Pro Ser Ala Arg Ser Ser 55

Thr Leu Arg Ala Ser Cys Arg Asn Glu Leu Gly Ser Leu Leu Pro Gly

Gly Glu Thr Ser Leu Gly Leu Lys Glu Gly His Arg Thr Lys Gly Ala

Arg Gly Gly His Arg Glu Asp Pro Gln Glu Lys

<210> 181

<211> 27 <212> PRT <213> Homo sapien

<400> 181

Met Ser Thr His Ser Val His Ser Thr Gly Leu Pro Phe Tyr Lys Leu

Ser Leu Thr Ser Leu Ser Ser Met Thr Leu Val 20

<210> 182 <211> 40 <212> PRT

<213> Homo sapien

<400> 182

Cys Phe Glu Lys Met Leu Asn Arg Leu Gly Ala Val Ala His Val Cys 5

Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Trp Ile Met Arg Ser Gly 25

Val Arg Asp Gln Pro Gly Gln His 35

<210> 183

<211> 26

<212> PRT

<213> Homo sapien

<400> 183

Met Arg Lys Gln Ala Phe Asp Leu Leu Glu Ser Thr Ala Gln Lys Ser

10 15

Leu Val Pro Ile Phe Glu Phe Pro Lys Gln 20

<210> 184 <211> 39

<212> PRT

<213> Homo sapien

<400> 184

Met Lys Glu Glu Gly Arg Leu Leu Thr Val Ala Glu Gly Arg Gln Gly

Pro Ser Cys Ser Ser His Ile Asn Ser Lys Lys Pro Ser Gln Gln Asn 25

Lys Ser Ile Phe Asn Ser Ser 35

<210> 185

<211> 76

<212> PRT

<213> Homo sapien

<400> 185

Met Val Glu Pro Ala Leu Ser Gly Cys Gln Gln Arg Lys Gly Gly Tyr

Ser Ser Glu Arg Gln Ser Gln Pro Thr Gln Gly Gln Gly Val Arg

Pro Gln Thr Tyr Ser Pro Ala Asp Leu Thr Val Arg Pro Ser Cys Ser

Gly Thr Gly Asn Ala Gln Ala Glu Ile Ala Leu Leu His Thr Tyr Asn 50 55

Thr Thr Leu Glu Asn Asn Leu Glu Trp Phe Thr Leu 70

<210> 186

<211> 35 <212> PRT

<213> Homo sapien

<400> 186

Met Arg Gln Pro Cys Leu Ala Ile Pro Glu Ala Ser Ala Ser Leu Ile

Cys Arg Cys His Arg His Phe Thr Tyr Ser His Leu Met Ala Arg Phe 20 25

Leu Leu Leu 35

<210> 187

<211> 76 <212> PRT

<213> Homo sapien

<400> 187

Met Phe Phe Ala Leu Met Gly Ile Cys Pro Gly Thr Leu Pro Pro Gly

Pro Pro Leu Pro Arg Trp Pro Pro Pro Val Phe Cys Phe Phe Phe

Phe Phe Gly Phe Phe Cys Cys Phe Thr Val Lys Leu Phe Ile Glu 40

Gln Ile Glu Asp Asn Asp Ile Cys Phe Tyr Tyr Arg Ser Leu Pro Ser

Ser Tyr Ile Ile Asp Thr Tyr Tyr Glu Thr Cys Ile 70

<210> 188

<211> 173

<212> PRT

<213> Homo sapien

<400> 188

Met Ile Gly Cys Ser Leu Leu Val Ala Cys Leu Cys Cys Leu Val Gln

Ser Phe Arg Ala Met Phe Ser Cys Phe Ser Gly Leu Ser Leu Cys Leu

Met Leu Pro Leu Trp Cys Val Cys Pro Thr Val Cys Ala Phe Phe Cys

Gly Tyr Leu Leu Phe Phe Ser Leu Arg His Ala Ala Cys Gly Cys Leu

Leu Val Cys Leu Ser Cys Leu Ala Leu Pro Ser Gly Pro Ile Leu Ser

Phe Ser Phe Cys Leu Arg Val Val Ser Ser Val Arg Val Ala Cys Ala 90

Arg Ser Ala Ala Val Leu Leu Leu Arg Gly Val Pro Pro Pro Ser Leu 105

Arg Thr Leu Ser Leu Ile Ala Ser Thr Ala Thr Arg Leu Ser Phe Val

Phe Leu Phe Ser Leu Pro Arg Gly Leu Leu Cys Val Gly Gly Ser Gly

Ser Val Leu Gly Ser Leu Val Arg Arg Ala Gln Ser Val Gly Leu Arg

Asp Phe Val Ser Val Leu Gln Val Val Leu Thr Cys Leu 165

<210> 189 <211> 29 <212> PRT <213> Homo sapien

<400> 189

Met Val Leu Tyr Ser Glu Gly His Gln His Gly Pro His Leu Leu Asn

Met Glu Asn Gln Asn Leu Asn Glu Leu Pro Leu Lys Gly

<210> 190

<211> 122

<212> PRT

<213> Homo sapien

<400> 190

Phe Phe Ala Asp Glu Val Ser Arg Leu Ser Pro Gly Leu Glu Cys Ser

Gly Val Ile Ser Ala His Cys Asn Phe His Leu Leu Gly Ser Ser Ser

20

25

30

Ser Pro Ala Ser Ala Ser Gln Val Ala Glu Ile Thr Gly Ala Cys His 35 40 45

Pro Thr Trp Leu Ile Phe Val Ile Leu Val Glu Thr Gly Phe His His 50 55 60

Val Gly Gln Ala Asp Ala Leu Leu Thr Ser Gly Asp Pro Pro Phe Ser 65 70 75 80

Ala Pro Lys Val Leu Gly Ile Thr Gly Val Ser His Arg Ala Arg Pro 85 90 95

Ala Asn Thr Phe Ala Leu Thr Thr Leu Gly Leu Leu Tyr Lys Ile Val

Met Ile Ala Met Glu Val Leu Pro Val Pro 115 120

<210> 191

<211> 11

<212> PRT

<213> Homo sapien

<400> 191

Met Trp Arg Ala Lys Gln Tyr Asp Leu Gln Thr 1 5 10

<210> 192

<211> 28

<212> PRT

<213> Homo sapien

<400> 192

Met Met Phe Ser Leu Ser Gln Lys Gly Ser Ala Ala Val Gln Ser Pro 1 5 10 15

Ser Thr Leu Ser Thr Pro Thr Phe Ser Ile Ser Tyr

<210> 193

<211> 48

<212> PRT

<213> Homo sapien

<400> 193

Met Asp Ser Gly Ala Arg Ala Gly Lys Pro Leu Leu Asp Pro Val Cys 1 5 10 15

Leu Pro Ala Trp Ser Leu Cys Leu Gln Pro Cys Leu Tyr Ser Ser Leu 20 25 30

Pro Pro His Gln Pro Pro Leu Ala Ser Pro Tyr Arg Leu Ser Lys Lys 35 40 45

<210> 194

<211> 1138

<212> PRT

<213> Homo sapien

<400> 194

Met Gly Asp Phe Ala Ala Pro Ala Ala Ala Ala Asn Gly Ser Ser Ile 1 5 10 15

Cys Ile Asn Ser Ser Leu Asn Ser Ser Leu Gly Gly Ala Gly Ile Gly 20 25 30

Val Asn Asn Thr Pro Asn Ser Thr Pro Ala Ala Pro Ser Ser Asn His 35 40 45

Pro Ala Ala Gly Gly Cys Gly Gly Ser Gly Gly Pro Gly Gly Ser 50 55 60

Ala Ala Val Pro Lys His Ser Thr Val Val Glu Arg Leu Arg Gln Arg 65 70 75 80

Ile Glu Gly Cys Arg Arg His His Val Asn Cys Glu Asn Arg Tyr Gln 85 90 95

Gln Ala Gln Val Glu Gln Leu Glu Leu Glu Arg Arg Asp Thr Val Ser

Leu Tyr Gln Arg Thr Leu Glu Gln Arg Ala Lys Lys Ser Gly Ala Gly
115 120 125

Thr Gly Lys Gln Gln His Pro Ser Lys Pro Gln Gln Asp Ala Glu Ala 130 135 140

Ala Ser Ala Glu Gln Arg Asn His Thr Leu Ile Met Leu Gln Glu Thr 145 150 155 160

- Val Lys Arg Lys Leu Glu Gly Ala Arg Ser Pro Leu Asn Gly Asp Gln 165 170 175
- Gln Asn Gly Ala Cys Asp Gly Asn Phe Ser Pro Thr Ser Lys Arg Ile 180 185 190
- Arg Lys Asp Ile Ser Ala Gly Met Glu Ala Ile Asn Asn Leu Pro Ser 195 200 205
- Asn Met Pro Leu Pro Ser Ala Ser Pro Leu His Gln Leu Asp Leu Lys 210 215 220
- Pro Ser Leu Pro Leu Gln Asn Ser Gly Thr His Thr Pro Gly Leu Leu 225 235 240
- Glu Asp Leu Ser Lys Asn Gly Arg Leu Pro Glu Ile Lys Leu Pro Val 245 250 255
- Asn Gly Cys Ser Asp Leu Glu Asp Ser Phe Thr Ile Leu Gln Ser Lys 260 265 270
- Asp Leu Lys Gln Glu Pro Leu Asp Asp Pro Thr Cys Ile Asp Thr Ser 275 280 285
- Glu Thr Ser Leu Ser Asn Gln Asn Lys Leu Phe Ser Asp Ile Asn Leu 290 295 300
- Asn Asp Gln Glu Trp Gln Glu Leu Ile Asp Glu Leu Ala Asn Thr Val 305 310 315 320
- Pro Glu Asp Asp Ile Gln Asp Leu Phe Asn Glu Asp Phe Glu Glu Lys 325 330 335
- Lys Glu Pro Glu Phe Ser Gln Pro Ala Thr Glu Thr Pro Leu Ser Gln 340 345 350
- Glu Ser Ala Ser Val Lys Ser Asp Pro Ser His Ser Pro Phe Ala His 355 360 365
- Val Ser Met Gly Ser Pro Gln Ala Arg Pro Ser Ser Gly Pro Pro 370 380
- Phe Ser Thr Val Ser Thr Ala Thr Ser Leu Pro Ser Val Ala Ser Thr 385 390 395 400

Pro	Ala	Ala	Pro	Asn 405	Pro	Ala	Ser	Ser	Pro 410	Ala	Asn	Cys	Ala	Val 415	Gln
Ser	Pro	Gln	Thr 420	Pro	Asn	Gln	Ala	His 425	Thr	Pro	Gly	Gln	Ala 430	Pro	Pro
Arg	Pro	Gly 435	Asn	Gly	Tyr	Leu	Leu 440	Asn	Pro	Ala	Ala	Val 445	Thr	Val	Ala
Gly	Ser 450	Ala	Ser	Gly	Pro	Val 455	Ala	Val	Pro	Ser	Ser 460	Asp	Met	Ser	Pro
Ala 465	Glu	Gln	Leu	Lys	Gln 470	Met	Ala	Ala	Gln	Gln 475	Gln	Gln	Arg	Ala	Lys 480
Leu	Met	Gln	Gln	Lys 485	Gln	Gln	Gln	Gln	Gln 490	Gln	Gln	Gln	Gln	Gln 495	Gln
Gln	Gln	Gln	Gln 500	Gln	Gln	Gln	Gln	Gln 505	Gln	Gln	Gln	Gln	Gln 510	His	Ser
Asn	Gln	Thr 515	Ser	Asn	Trp	Ser	Pro 520	Leu	Gly	Pro	Pro	Ser 525	Ser	Pro	Tyr
Gly	Ala 530	Ala	Phe	Thr	Ala	Glu 535	Lys	Pro	Asn	Ser	Pro 540	Met	Met	Tyr	Pro
Gln 545	Ala	Phe	Asn	Asn	Gln 550	Asn	Pro	Ile	Val	Pro 555	Pro	Met	Ala	Asn	Asn 560
Leu	Gln	Lys	Thr	Thr 565	Met	Asn	Asn	Tyr	Leu 570	Pro	Gln	Asn	His	Met 575	Asn
Met	Ile	Asn	Gln 580	Gln	Pro	Asn	Asn	Leu 585	Gly	Thr	Asn	Ser	Leu 590	Asn	Lys
Gln	His	Asn 595	Ile	Leu	Thr	Tyr	Gly 600	Asn	Thr	Lys	Pro	Leu 605	Thr	His	Phe
Asn	Ala 610	Asp	Leu	Ser	Gln	Arg 615	Met	Thr	Pro	Pro	Val 620	Ala	Asn	Pro	Asn
Lys	Asn	Pro	Leu	Met	Pro	Tyr	Ile	Gln							

Gln Gln Gln Gln Gln Gln Gln Gln Pro Pro Pro Pro Gln Leu Gln Ala Pro Arg Ala His Leu Ser Glu Asp Gln Lys Arg Leu Leu Met Lys Gln Lys Gly Val Met Asn Gln Pro Met Ala Tyr Ala Ala Leu Pro Ser His Gly Gln Glu Gln His Pro Val Gly Leu Pro Arg Thr Thr Gly Pro Met Gln Ser Ser Val Pro Pro Gly Ser Gly Gly Met Val Ser Gly Ala Ser Pro Ala Gly Pro Gly Phe Leu Gly Ser Gln Pro Gln Ala Ala Ile Met Lys Gln Met Leu Ile Asp Gln Arg Ala Gln Leu Ile Glu Gln Gln Lys Gln Gln Phe Leu Arg Glu Gln Arg Gln Gln Gln Gln Gln Gln Gln Gln Gln Ile Leu Ala Glu Gln Gln Leu Gln Gln Ser His Leu Pro Arg Gln His Leu Gln Pro Gln Arg Asn Pro Tyr Pro Val Gln Gln Val Asn Gln Phe Gln Gly Ser Pro Gln Asp Ile Ala Ala Val Arg Ser Gln Ala Ala Leu Gln Ser Met Arg Thr Ser Arg Leu Met Ala Gln Asn Ala Gly Met Met Gly Ile Gly Pro Ser Gln Asn Pro Gly Thr Met Ala Thr Ala Ala Gln Ser Glu Met Gly Leu Ala Pro Tyr Ser Thr Thr

Pro Thr Ser Gln Pro Gly Met Tyr Asn Met Ser Thr Gly Met Thr Gln 865 870 875 880

Met Leu Gln His Pro Asn Gln Ser Gly Met Ser Ile Thr His Asn Gln 885 890 895

Ala Gln Gly Pro Arg Gln Pro Ala Ser Gly Gln Gly Val Gly Met Val 900 905 910

Ser Gly Phe Gly Gln Ser Met Leu Val Asn Ser Ala Ile Thr Gln Gln 915 920 925

His Pro Gln Met Lys Gly Pro Val Gly Gln Ala Leu Pro Arg Pro Gln 930 935 940

Ala Pro Pro Arg Leu Gln Ser Leu Met Gly Thr Val Gln Gln Gly Ala 945 950 955 960

Gln Ser Trp Gln Gln Arg Ser Leu Gln Gly Met Pro Gly Arg Thr Ser 965 970 975

Gly Glu Leu Gly Pro Phe Asn Asn Gly Ala Ser Tyr Pro Leu Gln Ala 980 985 990

Gly Gln Pro Arg Leu Thr Lys Gln His Phe Pro Gln Gly Leu Ser Gln 995 1000 1005

Ser Val Val Asp Ala Asn Thr Gly Thr Val Arg Thr Leu Asn Pro 1010 1015 1020

Ala Ala Met Gly Arg Gln Met Met Pro Ser Leu Pro Gly Gln Gln 1025 1030 1035

Gly Thr Ser Gln Ala Arg Pro Met Val Met Ser Gly Leu Ser Gln 1040 1045 1050

Gly Val Pro Gly Met Pro Ala Phe Ser Gln Pro Pro Ala Gln Gln 1055 1060 1065

Gln Ile Pro Ser Gly Ser Phe Ala Pro Ser Ser Gln Ser Gln Ala 1070 1075 1080

Tyr Glu Arg Asn Ala Pro Gln Asp Val Ser Tyr Asn Tyr Ser Gly 1085 1090 1095

Asp Gly Ala Gly Gly Ser Phe Pro Gly Leu Pro Asp Gly Ala Asp 1100 1105

Leu Val Asp Ser Ile Ile Lys Gly Gly Pro Gly Asp Glu Trp Met 1115 1120 1125

Gln Glu Leu Asp Glu Leu Phe Gly Asn Pro

<210> 195

<211> 30 <212> PRT

<213> Homo sapien

<400> 195

Met Gln Leu Pro Leu Ser His Lys Arg Lys Lys Gln Tyr Ser Phe Tyr 10

Val Phe Asp Thr Asn Ile Lys His Asn Ser Val Leu Val His 25

<210> 196

<211> 46 <212> PRT <213> Homo sapien

<400> 196

Met Lys Ile Tyr Phe Lys Ile Leu Leu Met Phe Leu Lys Lys Tyr Phe

Leu Arg Phe His Leu Met Lys Thr Met Lys Tyr Ser Val Phe Tyr Ser

Thr Thr Arg Gln Met Trp Ser Ile Pro Phe Val Phe Phe 35 40

<210> 197

<211> 18

<212> PRT

<213> Homo sapien

<400> 197

Met Leu Glu Ala Gly Ile Ser Phe Lys Val Arg Leu Gln Lys Trp Lys 10

Gln Ile

<210> 198

<211> 132

<212> PRT

<213> Homo sapien

<400> 198

Met Phe Tyr Ser Ile Leu Ala Met Leu Arg Asp Arg Gly Ala Leu Gln

Asp Leu Met Asn Met Leu Glu Leu Asp Ser Ser Gly His Leu Asp Gly

Pro Gly Gly Ala Ile Leu Lys Lys Leu Gln Gln Asp Ser Asn His Ala

Trp Phe Asn Pro Lys Asp Pro Ile Leu Tyr Leu Leu Glu Ala Ile Met

Val Leu Ser Asp Phe Gln His Asp Leu Leu Ala Cys Ser Met Glu Lys

Arg Ile Leu Leu Gln Gln Glu Leu Val Arg Ser Ile Leu Glu Pro

Asn Phe Arg Tyr Pro Trp Ser Ile Pro Phe Thr Leu Lys Pro Glu Leu 100

Leu Ala Pro Leu Gln Ser Glu Gly Leu Ala Ser Pro Met Ala Ala Gly 120

Gly Val Trp Pro 130

<210> 199 <211> 226 <212> PRT

<213> Homo sapien

<400> 199

Pro Pro Lys His Leu Lys Ser Lys Phe Gly Gly Met Arg Lys Ala Asp

Asp Asp Leu Ile Leu Leu Gly Arg Ile Glu Glu Pro Phe Trp Gln 20 25

Asn Phe Lys His Leu Gln Glu Glu Val Phe Gln Lys Ile Lys Thr Leu 35 40 45

Ala Gln Leu Ser Lys Asp Val Gln Asp Val Met Phe Tyr Ser Ile Leu 50 55 60

Ala Met Leu Arg Asp Arg Gly Ala Leu Gln Asp Leu Met Asn Met Leu 65 70 75 80

Glu Leu Asp Ser Ser Gly His Leu Asp Gly Pro Gly Gly Ala Ile Leu 85 90 95

Lys Lys Leu Gln Gln Asp Ser Asn His Ala Trp Phe Asn Pro Lys Asp 100 105 110

Pro Ile Leu Tyr Leu Leu Glu Ala Ile Met Val Leu Ser Asp Phe Gln 115 120 125

His Asp Leu Leu Ala Cys Ser Met Glu Lys Arg Ile Leu Leu Gln Gln 130 135 140

Gln Glu Leu Val Arg Ser Ile Leu Glu Pro Asn Phe Arg Tyr Pro Trp
145 150 155

Ser Ile Pro Phe Thr Leu Lys Pro Glu Leu Leu Ala Pro Leu Gln Ser 165 170 175

Glu Gly Leu Ala Ile Thr Tyr Gly Leu Leu Glu Glu Cys Gly Leu Arg 180 185 190

Thr Glu Leu Asp Asn Pro Arg Ser Thr Trp Asp Val Glu Ala Lys Met 195 200 205

Pro Leu Ser Ala Leu Tyr Gly Thr Leu Ser Leu Leu Gln Gln Leu Ala 210 215 220

Glu Ala 225

<210> 200

<211> 37

<212> PRT

<213> Homo sapien

<400> 200

Met Ala Lys His Lys Gly Gly Tyr Gly Lys Tyr Trp Val Thr Leu Ile

Ile Gly Leu Asn Ala Thr Asn Asn Ile Ile Ile Val Leu Thr Tyr Phe

Phe Arg Leu Leu Ser 35

<210> 201 <211> 28

<212> PRT

<213> Homo sapien

<400> 201

Met Val His Lys Ser Tyr Phe Thr Thr Leu Ser Leu Val Ile Leu Gly 5

Val Trp Pro Cys Lys Ala Ser Ser Gln Arg Phe Cys 20

<210> 202

<211> 77

<212> PRT

<213> Homo sapien

<400> 202

Met Gly Ser Val Cys Val Cys Phe His Arg Ser Thr Thr Ser Glu Val 5

Ser Leu His Leu Cys Ile Phe Thr Ser Gln Gly Gln Gly Pro Gly Asn 20 25

Leu Arg Gly Ser His Ser Phe Ser Leu Pro Gln Thr Met Pro Leu Pro 35 40

Pro Ile Ser Leu Gly Gln Glu Ser Gly Phe Cys Phe Pro Tyr Phe Phe 50

Phe Pro Arg His Trp Glu Ala Ser Gly Glu Gln His Gln 70

<210> 203

<211> 70 <212> PRT

<213> Homo sapien

<400> 203

Met Gly Pro Pro Leu Pro Leu Gly Gly Trp Ser Ser Asp Leu Leu Ala 1 5 10 15

Gln Lys Val Leu Phe Phe His Leu Leu Cys Leu Asn Glu Ser Ser Trp 20 25 30

Thr Tyr Thr Pro Leu Ser Asp Glu Arg Ala Arg Leu Arg Arg Cys Ala 35 40 45

Gly His Leu Leu Arg Ile His Val Gly Ser Ala Ala Pro Gly Gly 50 $\,$ 55 $\,$ 60

Ser Thr Ser Ala Ala Thr 65 70

<210> 204

<211> 37

<212> PRT

<213> Homo sapien

<400> 204

Met Ser Lys Lys Lys Asp Gln Asp Leu Cys Leu Lys Ile Glu Met His 1 5 10 15

Thr Ala Ala Gln Lys Leu Arg Pro Ala Ser Lys Leu His Glu Ala 20 25 30

Leu Val Lys Thr Asp 35

<210> 205

<211> 87

<212> PRT

<213> Homo sapien

<400> 205

Met Pro Ser Val Ala Gln Gly Pro Val Pro Trp His Leu Gly Ser Arg
1 5 10 15

Ser Ala Val Ala Val Phe Glu Phe Leu Val Met Phe Glu Gln Arg Pro 20 25 30

Tyr Val Cys Ile Leu His Trp Ala Pro Gln Ile Thr Trp Pro Ile Leu

35

40

45

Arg Arg Gly Val Ser His Leu Gln Ser Pro Lys Ser Pro Leu Glu Val 55

Phe Leu Asn Glu Arg Thr Glu Ala Phe Leu Lys Ser Ser Val Gly Glu 75

Thr Val His His His Thr Gln 85

<210> 206

<211> 46

<212> PRT

<213> Homo sapien

<400> 206

Met Ser Pro Gly Thr Ala Met Ala Leu Gly Ala Pro Thr Leu Phe Phe

Phe Phe Phe Phe Phe Phe Tyr Asn Gln Pro Ile Arg Asp Leu Ser

Ile Asn Lys Pro Leu Phe Ile Ile Arg Asn Trp Leu Thr Gln 40

<210> 207

<211> 91 <212> PRT

<213> Homo sapien

<400> 207

Met Ser Ser Pro Gln Ser Ile Glu His Asn His Asp Ser His Glu Leu

Pro Thr Pro Pro Ala Ala Ser Ala Gln Arg Glu Ser Pro Leu Gln Val

Cys Leu Ile Ala Glu Pro Ile Phe Phe Leu Pro Gly Gln Gln Leu Leu 40

Ser Ser Met Ser Arg His Trp Cys Ser Leu Gly Trp Ala Pro Val Thr 55

Pro Met Glu Ile Leu Asp Gly Cys Tyr Arg Thr Gly Leu Asp Val Arg 70

Gly Leu Gly Asn Gly Ala Gln Glu Ser Ser Ser 85 90

<210> 208

<211> 87

<212> PRT

<213> Homo sapien

<400> 208

Met Cys Val Arg Asn Ser Met Phe Lys Lys Glu Ile Ile Gln Arg Val 1 5 10 15

Thr Asn His Gly Ser Val Gly His Trp Thr Lys Leu Gly Phe Trp Thr 20 25 30

Phe Leu Pro Asn Ile Asn Phe Ala Leu Ala Ser Val Tyr Thr His Thr 35 40 45

His Thr Thr Thr Asn Thr Thr Gln Thr Thr Phe Trp Ala Asn Thr Thr 50 60

Arg Arg Gln Arg Arg Leu Pro Gly Leu Lys Leu Gly Ser Leu Pro Ala 65 70 75 80

Pro Gln Phe Ser Gln Gln Leu 85

<210> 209

<211> 55

<212> PRT

<213> Homo sapien

<400> 209

Met Thr Cys Phe Arg Glu Cys Leu Leu Val Tyr Leu Tyr Ser Ile Cys 1 5 10 15

Leu Leu Asn Ser Leu His Lys Leu Glu Leu Leu Ser Arg Arg Leu Arg 20 25 30

Glu Cys Lys Tyr Val Thr His Lys Met His Trp Ser Met Val Asn Lys \$35\$

Thr Asn His Phe Gly Leu Val

<210> 210 <211> 58 <212> PRT <213> Homo sapien <400> 210 Met Val Ile Phe Tyr Ser Ser Pro Ser Gln Asp Ser Ala Leu Ile Tyr Tyr Ile Pro Phe Ile Leu Leu Tyr Arg Leu Leu Ser Glu Thr His Val Gln Ile Arg Asp Lys Ile Leu Lys His Ile Thr Pro Ser Leu Val Phe Ser Ile Gln Ile Leu Arg Asn Ser Cys Tyr <210> 211 <211> 37 <212> PRT <213> Homo sapien <400> 211 Met Asn Leu Tyr Leu Lys Met Lys Thr Ile Pro Lys Lys Thr Cys Met 10 Ser Lys Thr Glu Leu Phe Leu Pro Phe Thr Pro Lys Tyr Leu Lys Leu 25 Asn Leu Ser His Phe 35 <210> 212 <211> 99 <212> PRT <213> Homo sapien <400> 212 Phe Phe Phe Leu Arg Trp Ser Leu Ala Leu Ser Pro Arg Leu Glu

Ser Asp Ser Arg Ala Ser Pro Thr Phe Gln Val Ala Trp Ile Thr Gly

Cys Ser Gly Val Ile Ser Thr His Cys Asn Leu Cys Phe Pro Gly Ser

35 40

Val Arg His His Ser Trp Leu Ile Phe Val Leu Leu Val Glu Thr Gly 50 55

Phe His His Val Val Gln Ala Val Glu Leu Leu Thr Ser Arg Asp Pro 70

Pro Ala Ser Ala Ser Gln Ser Ala Ala Ile Ile Gly Val Asn His Cys 85 90

Ala Arg Pro

<210> 213 <211> 43 <212> PRT <213> Homo sapien

<400> 213

Met Gln Glu Phe Thr Trp Leu Phe Glu Lys Glu Asn Phe Lys Val Ser 10

Gly Trp Thr Glu Ser His Glu Ala Arg Ser Leu Leu Thr Ala Arg Ser 20 25

Leu Glu Lys Gln Val Ser Gly Ser Phe Thr Ser 35 40

<210> 214

<211> 61

<212> PRT <213> Homo sapien

<400> 214

Met Ala Val Asp Phe Tyr Asn Phe Val Thr Lys Leu Val Val Thr Thr

Gly Tyr Leu Arg Ile Ser Phe Leu Ala Tyr Lys Phe Phe Ser Phe Pro

Phe Leu Asp Ser Leu Ser Leu Cys Cys Pro Gly Leu Glu Cys Ser Gly 35 40

Val Ile Pro Ala His Tyr Asn Leu Tyr Leu Pro Gly Arg 50 55

<210> 215 <211> 127 <212> PRT <213> Homo sapien <400> 215 Ser Gln Asn Ile Phe Phe Gly Val Ala Ile Phe Phe Phe Ser Phe Phe 5 Arg Gln Ser Leu Ser Leu Val Ala Gln Ala Arg Val Gln Trp Arg Asp 20 25 Pro Gly Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Arg Phe Leu Gly Leu Ser Leu Pro Ser Ser Ala Gly Tyr Arg Arg Ala Pro Pro Cys Pro Ala Leu Leu Tyr Phe Ala Val Glu Thr Gly Phe His His Val Gly 70 Gln Ala Gly Leu Glu Leu Thr Ser Gly Asn Pro Ala Ala Ser Ala 90 Ser Gln Ser Ala Gly Ile Thr Gly Thr Ser His Cys Thr Gln Pro Tyr Tyr His Lys Ser Ser Ala Cys Trp Tyr Leu Ile Arg Phe Tyr Leu 120 <210> 216 <211> 13 <212> PRT <213> Homo sapien <400> 216 Met Glu Cys Ser Ser Leu Ala Glu Phe Lys Pro Val Phe <210> 217 <211> 100 <212> PRT

<213> Homo sapien

<400> 217

Pro Gln Gln Thr Leu Lys Arg Ile Gln Gln Val Leu Ile Lys Cys Cys 1 5 10 15

Leu Ala Phe Tyr Leu Phe Leu Phe Phe Phe Phe Leu Arg Trp Ser Leu 20 25 30

Ala Leu Leu Pro Ser Leu Lys Cys Ser Gly Val Ile Ser Ala His Cys 35 40 45

Asn Leu Arg Leu Pro Gly Leu Gly Asp Ser Leu Ala Ser Ala Ser Arg 50 55 60

Val Ala Gly Met Thr Thr Gly Thr Cys His His Ala Gln Leu Ile Phe 70 75 80

Val Phe Leu Val Glu Thr Gly Phe Cys Val Ser Gln Asp Gly Leu Asp 85 90 95

Leu Leu Ile Ser 100

<210> 218

<211> 46

<212> PRT

<213> Homo sapien

<400> 218

Met Glu Gly Gly Glu Met Ser Thr Gln Val Glu Asn Arg Ser Glu Gly 1 5 10 15

Thr Ile Pro Ile Gln Thr Thr Cys Lys Ser His Asn Lys Ala Pro His 20 25 30

Cys Thr Glu Leu Arg His Lys Gln Arg Phe Pro Thr Asp Gly 35 40 45

<210> 219

<211> 72

<212> PRT

<213> Homo sapien

<400> 219

Ile Ser Phe Ile Phe Phe Ser Glu Ala Cys Gln Val Glu Val Arg Leu 5 10 15

Leu Leu Ala Tyr Asn Ser Ser Ala Arg Ile Pro Lys Cys Pro Trp Met

20 30

Glu Gly Gly Glu Met Ser Pro Gln Val Glu Thr Ser Ile Glu Gly Thr 40

Ile Pro Phe Ser Lys Pro Val Lys Val Tyr Ile Met Pro Lys Pro Ala 50 55

Arg Arg Pro Lys Pro Ala Arg Arg

<210> 220 <211> 41 <212> PRT

<213> Homo sapien

<400> 220

Met Glu Cys Lys Val Ile Lys Cys Ser Cys Phe His Leu Glu Gly Cys

Gly Pro Glu Gly Lys Arg Ser Pro Lys Tyr Pro Pro Pro Trp Cys Ser 25

Ser Leu Cys Leu Val Pro Ala Arg Ala 35

<210> 221 <211> 30 <212> PRT

<213> Homo sapien

<400> 221

Met Asn Ser Phe Gly Tyr Met Thr Pro Ser Lys Phe Phe Lys Lys Glu

Ile Thr Phe Lys Thr Thr Tyr Ile Phe Cys Phe Cys Leu Arg

<210> 222 <211> 22 <212> PRT

<213> Homo sapien

<400> 222

Met Leu Gln Ile Gly His Leu Leu Ser Met His Ser Leu Asp Lys Asn 5 10

Ile Gly Gln Val Gly Met 20

<210> 223 <211> 18 <212> PRT

<213> Homo sapien

<400> 223

Met Ser Asp Arg Val Val Ala Leu Leu Glu Val Phe Phe Pro Phe Gln

Arg Glu

<210> 224

<211> 133 <212> PRT <213> Homo sapien

<400> 224

Met Gly Asn Ser Ile Asp Thr Val Arg Tyr Gly Lys Glu Ser Asp Leu

Gly Asp Val Ser Glu Glu His Gly Glu Trp Asn Lys Glu Ser Ser Asn 2.0

Asn Glu Gln Asp Asn Ser Leu Leu Glu Gln Tyr Leu Thr Ser Val Gln

Gln Leu Glu Asp Ala Asp Glu Arg Thr Asn Phe Asp Thr Glu Thr Arg

Asp Ser Lys Leu His Ile Ala Cys Phe Pro Val Gln Leu Asp Thr Leu 65 70 75

Ser Asp Gly Ala Ser Val Asp Glu Ser His Gly Ile Ser Pro Pro Leu 85 90

Gln Gly Glu Ile Ser Gln Thr Gln Glu Asn Ser Lys Leu Asn Ala Glu 100 105 110

Val Gln Gly Gln Pro Glu Cys Asp Ser Thr Phe Gln Leu Leu His 115 120

Val Gly Val Thr Val 130 <210> 225 <211> 50 <212> PRT <213> Homo sapien <400> 225 Met Arg Asn Ser Ser Pro Ile Leu Thr Pro Ala Leu Phe Ser Phe His 5 10 Met Tyr Ile Gly Pro Leu Ile Arg Ile Phe Lys Lys Phe Pro Arg Pro 20 25 Pro Asn Leu Thr Ile Asp Asp Pro Leu Ser Leu Phe Arg Asn Tyr 40 Ile Gly 50 <210> 226 <211> 43 <212> PRT <213> Homo sapien <400> 226 Met His Ser Phe Phe Leu Ser Met Leu Cys Pro Glu Ala Leu Arg Val 5 Leu Leu Lys Gln Ala Ala Gly Leu Leu Arg Glu Ile Lys Gly Phe Ile 25 20 Ser Thr Thr Arg Cys Gln Asn Leu His Phe Glu <210> 227 <211> 99 <212> PRT <213> Homo sapien <400> 227 Met Leu Glu Arg Arg Ser Val Met Asp Arg Arg Arg Ala Gly Asn Ser Pro Pro Arg Ile Glu Lys Cys Leu Leu Gly Arg Glu Glu Gly Glu Ala

Gly Ala Gly Pro Ser Pro Gly Ser Leu Leu Gly Pro Gln Lys Ala Leu 40 35

Asn Gln Ala Pro Ser Leu Gln Gly Lys Pro Arg Pro Gln Pro Asp Asn

Leu Glu Gly Arg Lys Ser Gln Thr Leu Gly Leu Phe Phe Gly Gly Ile

Ile Gly Phe Phe Phe Phe Met Phe Leu Leu Glu Phe Cys Leu Leu Ala

Asn Ser Val

<210> 228

<211> 44

<212> PRT <213> Homo sapien

<400> 228

Met Lys Ser Ile Gln Leu Lys Phe Ser Tyr Ile Ile Glu Pro Gln Leu

Asn Gly Met Asn Gly Ile Gly Asn Leu Leu Glu Met Ile Phe Met Ile

Thr Phe Val Val Ile Pro Phe Ser Trp Leu Arg Phe

<210> 229

<211> 41

<212> PRT <213> Homo sapien

<400> 229

Tyr Phe Pro Leu Gln Ile Trp Ile Ser Glu Asp Ser Asn Asn Ile Glu

Ala Val Asn Gln Trp Lys Glu Thr Val Ile Asn Pro Glu Lys Val Val 20 25

Ile Arg Trp His Lys Leu Asn Pro Ser 35

<210> 230 <211> 48 <212> PRT <213> Homo sapien <400> 230 Met Leu Lys Gly His

Met Leu Lys Gly His Tyr Gln Tyr Gly Met Glu Asp Leu Ser Phe His 1 5 10 15

Thr Phe Ser Ser Ser Phe Leu Asn Phe Leu Leu Leu Phe Leu Leu Ser 20 25 30

Cys Met Val Ala Pro Phe Pro Phe Leu Leu Ser Val Pro Ser Lys Gln 35 40 45

<210> 231 <211> 108 <212> PRT <213> Homo sapien

<400> 231

Phe Leu Lys Arg Gln Ser Ile Ser Leu Leu Pro Gln Leu Glu Cys Ser 1 5 10 15

Gly Thr Ile Ile Val His His Thr Leu Glu Leu Leu Gly Lys Gly Ser

Ser Leu Ala Ser Ala Ser Gln Val Ala Arg Tyr Thr Gly Met Cys Tyr 35 40 45

His Ala Trp Leu Ile Lys Lys Ile Phe Leu Glu Met Arg Ser Cys Cys 50 55 60

Val Ala Gln Ala Gly Leu Lys Leu Leu Gly Ser Asn Asn Pro Pro Thr 65 70 75 80

Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Ser Thr Ala 85 90 95

Pro Tyr Leu Gln Ile Leu Asn Gln Ala Ile Ala Ile

<210> 232 <211> 64 <212> PRT <213> Homo sapien

<400> 232

Met Ser Pro Arg Ala Pro Phe Ala Pro Gly Cys Pro Gln Pro Leu Val

Val Phe Tyr Val Cys Phe Phe Phe Leu Ile Phe Cys Phe Val Lys

Lys His His Tyr Met Phe Leu Tyr Pro Arg Leu Lys Thr Phe Gly Asn 40

Leu Ile Ser Asn Ile Lys Ile Gln Ile Lys Thr His Ser Thr Ile Pro

<210> 233 <211> 35 <212> PRT <213> Homo sapien

<400> 233

Met Cys Val Asn Ala Ser Thr Val Gly Gln Met Cys Glu Asn Glu Leu

Lys His Met Leu Arg Ile Lys Val Asn Arg Arg Asn Phe Glu Arg Phe 25

Pro Leu Met 35

<210> 234 <211> 72 <212> PRT

<213> Homo sapien

<400> 234

Met Asn Ile Phe Pro Trp Ala Gly Gly Pro Trp Ser Leu Pro Gln Ala

Arg Tyr Arg Ala Pro Ala Cys Ala Pro Thr Asn His Gly Lys Gln Arg 20 25

Arg Pro Pro His Leu Lys Ser Trp Pro Val Val Val Ser Ser Val Phe 40

Leu Leu Ser Glu Gln Asn Val Leu Lys Leu Glu Leu Thr. Lys Val Lys

Ser Ser Lys Thr Thr Tyr Ala Thr

<210> 235

<211> 1163 <212> PRT <213> Homo sapien

<400> 235

Met Asp Arg Asn Arg Glu Ala Glu Met Glu Leu Arg Arg Gly Pro Ser

Pro Thr Arg Ala Gly Arg Gly His Glu Val Asp Gly Asp Lys Ala Thr

Cys His Thr Cys Cys Ile Cys Gly Lys Ser Phe Pro Phe Gln Ser Ser 4.0

Leu Ser Gln His Met Arg Lys His Thr Gly Glu Lys Pro Tyr Lys Cys 55

Pro Tyr Cys Asp His Arg Ala Ser Gln Lys Gly Asn Leu Lys Ile His

Ile Arg Ser His Arg Thr Gly Thr Leu Ile Gln Gly His Glu Pro Glu

Ala Gly Glu Ala Pro Leu Gly Glu Met Arg Ala Ser Glu Gly Leu Asp 100

Ala Cys Ala Ser Pro Thr Lys Ser Ala Ser Ala Cys Asn Arg Leu Leu

Asn Gly Ala Ser Gln Ala Asp Gly Ala Arg Val Leu Asn Gly Ala Ser

Gln Ala Asp Ser Gly Arg Val Leu Leu Arg Ser Ser Lys Lys Gly Ala 150

Glu Gly Ser Ala Cys Ala Pro Gly Glu Ala Lys Ala Ala Val Gln Cys 170

Ser Phe Cys Lys Ser Gln Phe Glu Arg Lys Lys Asp Leu Glu Leu His 185

Val His Gln Ala His Lys Pro Phe Lys Cys Arg Leu Cys Ser Tyr Ala 195 200 205

Thr Leu Arg Glu Glu Ser Leu Leu Ser His Ile Glu Arg Asp His Ile 210 215 220

Thr Ala Gln Gly Pro Gly Ser Gly Glu Ala Cys Val Glu Asn Gly Lys 225 230 235 240

Pro Glu Leu Ser Pro Gly Glu Phe Pro Cys Glu Val Cys Gly Gln Ala 245 250 255

Phe Ser Gln Thr Trp Phe Leu Lys Ala His Met Lys Lys His Arg Gly
260 265 270

Ser Phe Asp His Gly Cys His Ile Cys Gly Arg Arg Phe Lys Glu Pro 275 280 285

Trp Phe Leu Lys Asn His Met Lys Ala His Gly Pro Lys Thr Gly Ser 290 295 300

Lys Asn Arg Pro Lys Ser Glu Leu Asp Pro Ile Ala Thr Ile Asn Asn 305 310 315 320

Val Val Glu Glu Val Ile Val Ala Gly Leu Ser Leu Tyr Glu Val 325 330 335

Cys Ala Lys Cys Gly Asn Leu Phe Thr Asn Leu Asp Ser Leu Asn Ala 340 345 350

His Asn Ala Ile His Arg Arg Val Glu Ala Ser Arg Thr Arg Ala Pro 355 360 365

Ala Glu Glu Gly Ala Glu Gly Pro Ser Asp Thr Lys Gln Phe Phe Leu 370 375 380

Gln Cys Leu Asn Leu Arg Pro Ser Ala Ala Gly Asp Ser Cys Pro Gly 385 390 395 400

Thr Gln Ala Gly Arg Arg Val Ala Glu Leu Asp Pro Val Asn Ser Tyr
405 410 415

Gln Ala Trp Gln Leu Ala Thr Arg Gly Lys Val Ala Glu Pro Ala Glu

425

430

Tyr Leu Lys Tyr Gly Ala Trp Asp Glu Ala Leu Ala Gly Asp Val Ala 435 440445

Phe Asp Lys Asp Arg Arg Glu Tyr Val Leu Val Ser Gln Glu Lys Arg 450 455 460

Lys Arg Glu Gln Asp Ala Pro Ala Ala Gln Gly Pro Pro Arg Lys Arg 465 470 475 480

Ala Ser Gly Pro Gly Asp Pro Ala Pro Ala Gly His Leu Asp Pro Arg 485 490 495

Ser Ala Ala Arg Pro Asn Arg Arg Ala Ala Ala Thr Thr Gly Gln Gly 500 505 510

Lys Ser Ser Glu Cys Phe Glu Cys Gly Lys Ile Phe Arg Thr Tyr His 515 520 525

Gln Met Val Leu His Ser Arg Val His Arg Arg Ala Arg Arg Glu Arg 530 540

Asp Ser Asp Gly Asp Arg Ala Ala Arg Ala Arg Cys Gly Ser Leu Ser 545 550 555 560

Glu Gly Asp Ser Ala Ser Gln Pro Ser Ser Pro Gly Ser Ala Cys Ala 565 570 575

Ala Ala Asp Ser Pro Gly Ser Gly Leu Ala Asp Glu Ala Ala Glu Asp 580 585 590

Ser Gly Glu Glu Gly Ala Pro Glu Pro Ala Pro Gly Gly Gln Pro Arg 595 600 605

Arg Cys Cys Phe Ser Glu Glu Val Thr Ser Thr Glu Leu Ser Ser Gly 610 615 620

Asp Gln Ser His Lys Met Gly Asp Asn Ala Ser Glu Arg Asp Thr Gly 625 630 635 640

Glu Ser Lys Ala Gly Ile Ala Ala Ser Val Ser Ile Leu Glu Asn Ser 645 650 655

Ser Arg Glu Thr Ser Arg Arg Gln Glu Gln His Arg Phe Ser Met Asp 660 665 670

Leu Lys Met Pro Ala Phe His Pro Lys Gln Glu Val Pro Val Pro Gly 675 680 685

Asp Gly Val Glu Phe Pro Ser Ser Thr Gly Ala Glu Gly Gln Thr Gly 690 $\,$ 695 $\,$ 700 $\,$

His Pro Ala Glu Lys Leu Ser Asp Leu His Asn Lys Glu His Ser Gly 705 710 715 720

Gly Gly Lys Arg Ala Leu Ala Pro Asp Leu Met Pro Leu Asp Leu Ser 725 730 735

Ala Arg Ser Thr Arg Asp Asp Pro Ser Asn Lys Glu Thr Ala Ser Ser 740 745 750

Leu Gln Ala Ala Leu Val Val His Pro Cys Pro Tyr Cys Ser His Lys 755 760 765

Thr Tyr Tyr Pro Glu Val Leu Trp Met His Lys Arg Ile Trp His Arg
770 780

Val Ser Cys Asn Ser Val Ala Pro Pro Trp Ile Gln Pro Asn Gly Tyr 785 790 795 800

Lys Ser Ile Arg Ser Asn Leu Val Phe Leu Ser Arg Ser Gly Arg Thr 805 810 815

Gly Pro Pro Pro Ala Leu Gly Gly Lys Glu Cys Gln Pro Leu Leu 820 825 830

Ala Arg Phe Thr Arg Thr Gln Val Pro Gly Gly Met Pro Gly Ser Lys 835 840 845

Ser Gly Ser Ser Pro Leu Gly Val Val Thr Lys Ala Ala Ser Met Pro 850 855 860

Lys Asn Lys Glu Ser His Ser Gly Gly Pro Cys Ala Leu Trp Ala Pro 865 870 875 880

Gly Pro Asp Gly Tyr Arg Gln Thr Lys Pro Cys His Gly Gln Glu Pro 885 890 895

- His Gly Ala Ala Thr Gln Gly Pro Leu Ala Lys Pro Arg Gln Glu Ala 900 905 910
- Ser Ser Lys Pro Val Pro Ala Pro Gly Gly Gly Gly Phe Ser Arg Ser 915 920 925
- Ala Thr Pro Thr Pro Thr Val Ile Ala Arg Ala Gly Ala Gln Pro Ser 930 935 940
- Ala Asn Ser Lys Pro Val Glu Lys Phe Gly Val Pro Pro Ala Gly Ala 945 950 955 960
- Gly Phe Ala Pro Thr Asn Lys His Ser Ala Pro Asp Ser Leu Lys Ala 965 970 975
- Lys Phe Ser Ala Gln Pro Gln Gly Pro Pro Pro Ala Lys Gly Glu Gly 980 985 990
- Gly Ala Pro Pro Leu Pro Pro Arg Glu Pro Pro Ser Lys Ala Ala Gln 995 1000 1005
- Glu Leu Arg Thr Leu Ala Thr Cys Ala Ala Gly Ser Arg Gly Asp 1010 1015 1020
- Ala Ala Leu Gln Ala Gln Pro Gly Val Ala Gly Ala Pro Pro Val 1025 1030 1035
- Leu His Ser Ile Lys Gln Glu Pro Val Ala Glu Gly His Glu Lys 1040 1045 1050
- Arg Leu Asp Ile Leu Asn Ile Phe Lys Thr Tyr Ile Pro Lys Asp 1055
- Glu His Arg Gly Thr Leu Arg Thr Gln Ala Arg Pro Gly Glu Phe 1085 1090 1095
- Val Cys Ile Glu Cys Gly Lys Ser Phe His Gln Pro Gly His Leu 1100 1105 1110
- Arg Ala His Met Arg Ala His Ser Val Val Phe Glu Ser Asp Gly
 1115 1120 1125

Pro Arg Gly Ser Glu Val His Thr Thr Ser Ala Asp Ala Pro Lys 1130 1135

Gln Gly Arg Asp His Ser Asn Thr Gly Thr Val Gln Thr Val Pro 1145

Leu Arg Lys Gly Thr 1160

<210> 236

<211> 55 <212> PRT

<213> Homo sapien

<400> 236

Met Cys Val Phe Cys Gly Phe Phe Cys Ser Arg Phe Val Arg Glu Met 5 10

Trp Gly Asn Phe Gly Pro Lys Thr Asn Phe Thr Pro Gly Thr Pro Phe 25

Cys Pro Trp Leu Ser Pro Asn Leu Phe Cys Leu Val Val Trp Phe 40

Tyr Arg Leu Leu Ile Phe Tyr 50

<210> 237

<211> 156

<212> PRT

<213> Homo sapien

<400> 237

Met Pro Met Glu Gly His Thr Leu Cys Met Arg Ile Arg Gly Ser Trp 5

Leu Ala Ala Arg Leu Pro Val Met Pro Phe Glu Gly Asp Val Gly Pro 20 25

Trp Val Arg Met Lys Val Phe Ile Cys His Ser Ser Ser Pro Gln Val 35

Ala Ile His Leu Gly Gly Gly Arg Glu Gly Ser Ala Leu Ala Ile Val 55

Tyr Pro Ala Ser Leu Arg Phe Ile Asp Leu His Lys Arg Leu Cys Ser

Gly Lys Gly Arg Gly Pro Gln Lys Gly Ala Trp Gln Asp Arg Trp Met 90

Leu Tyr Gly His Met Glu Ile Thr Pro Ser Ser Leu Ala Pro Ala Ser 100 105

Ala Ser Arg Pro Leu His Gly Val Arg Cys Phe Cys Ala Cys Cys Pro

Thr Ser Leu His Ser Arg Ala Leu Ile Asn His Phe Asp Pro Pro Leu 130 135

Ala Glu Gly Ser Pro Leu Tyr Arg Val Gln Ser Leu 150

<210> 238

1.4

<211> 86

<212> PRT <213> Homo sapien

<400> 238

Met Met Asn Phe Leu Cys Leu Asn Phe Arg Asp Ile Trp Cys Asp Phe

His Leu Tyr Leu Met Leu Pro Leu Leu Pro Ser Leu Leu Asn Thr Ser 25

Lys Asn Ser Glu His Ile Leu Ile Pro Pro Val Phe Tyr Phe Tyr Asp 35 40 45

Leu Asp Ile Leu His His Lys Ile Pro Pro Asn Trp Asp Tyr Val Phe 55 50

Glu Val Ile His Phe Thr Ile Ile Thr Thr Ile Thr Ile Ile Phe Ile 65 70 75

Val Cys Phe Val Pro Gly

<210> 239 <211> 289 <212> PRT

<213> Homo sapien

<400> 239

Ala Asp Leu Ser Phe Ile Glu Asp Thr Val Ala Phe Pro Glu Lys Glu
1 5 10 15

Glu Asp Glu Glu Glu Glu Glu Glu Glu Trp Gly Tyr Glu Glu 20 25 30

Gly Val Glu Trp Gly Leu Val Phe Pro Asp Ala Asn Gly Glu Tyr Gln 35 40 45

Ser Pro Ile Asn Leu Asn Ser Arg Glu Ala Arg Tyr Asp Pro Ser Leu 50 55 60

Leu Asp Val Arg Leu Ser Pro Asn Tyr Val Val Cys Arg Asp Cys Glu 65 70 75 80

Val Thr Asn Asp Gly His Thr Ile Gln Val Ile Leu Lys Ser Lys Ser 85 90 95

Val Leu Ser Gly Gly Pro Leu Pro Gln Gly His Glu Phe Glu Leu Tyr 100 105 110

Glu Val Arg Phe His Trp Gly Arg Glu Asn Gln Arg Gly Ser Glu His

Thr Val Asn Phe Lys Ala Phe Pro Met Glu Leu His Leu Ile His Trp 130 135 140

Asn Ser Thr Leu Phe Gly Ser Ile Asp Glu Ala Val Gly Lys Pro His 145 150 155 160

Gly Ile Ala Ile Ile Ala Leu Phe Val Gln Ile Gly Lys Glu His Val 165 170 175

Gly Leu Lys Ala Val Thr Glu Ile Leu Gln Asp Ile Gln Tyr Lys Gly
180 185 190

Lys Ser Lys Thr Ile Pro Cys Phe Asn Pro Asn Thr Leu Leu Pro Asp 195 200 205

Pro Leu Leu Arg Asp Tyr Trp Val Tyr Glu Gly Ser Leu Thr Ile Pro 210 220

Pro Cys Ser Glu Gly Val Thr Trp Ile Leu Phe Arg Tyr Pro Leu Thr 225 230

Ile Ser Gln Leu Gln Ile Glu Glu Phe Arg Arg Leu Arg Thr His Val 250

Lys Gly Ala Glu Leu Val Glu Gly Cys Asp Gly Ile Leu Gly Asp Asn 260 265

Phe Arg Pro Thr Gln Pro Leu Ser Asp Arg Val Ile Arg Ala Ala Phe

Gln

<210> 240

<211> 59

<212> PRT

<213> Homo sapien

<400> 240

Met Cys Gln Ile Asp Arg Gln Asp Leu Val Leu Leu Lys Leu Val Ile 10

Tyr Cys Ser Arg His Leu Lys Gly Trp Arg Arg Ser Glu His Tyr Val 20 25

Pro Ala Arg Ala Ser Ile Thr Leu Arg Arg Ser Thr Ser His Leu Val 40 35 45

Ala Arg Ser Pro Asn Met Ser Ser Ser Gly Val

<210> 241 <211> 41 <212> PRT <213> Homo sapien

<400> 241

Met Leu Leu Asn Gly Leu His Asn Pro Ala Leu Lys His Leu Arg Asp 10

Leu Cys Lys Thr Phe Pro Trp Ser Leu Cys Phe Ser His Ile Asn Gln 20 25

Leu Ala Tyr Phe Ser His Ser Pro Ser 35

<210> 242

<211> 80 <212> PRT

<213> Homo sapien

<400> 242

ž :

Met Asn Cys Leu Tyr Pro Ser Pro Met Cys Phe Tyr Arg Ser Cys Leu 5 10 15

Val His Phe Val Ala Asp Leu Leu Gly Asp Phe Thr Glu Gly Lys Val 20 25 30

Ser Ser Lys Leu Tyr Asp Asp Phe Met Leu Ile Asp Leu Leu Ser Ser

Gly Ser Trp Glu Thr His Ser Ala Ile Ser Leu Leu Ser Tyr Phe Ser 50

Tyr Asp Ala Gln Pro Pro Lys Ala Thr Arg Glu Gln Tyr Arg Val Pro

<210> 243

<211> 45 <212> PRT <213> Homo sapien

<400> 243

Glu Arg Pro Gly Met Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala 5

Trp Asn Glu Leu Lys Gly Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr 20

Ile Asn Lys Val Glu Glu Leu Lys Lys Lys Tyr Gly Ile

<210> 244 <211> 24

<212> PRT

<213> Homo sapien

Met Cys Leu Asn Phe Ser Phe Asn Tyr Leu Ile Pro Phe Ala Gln Glu 1 5

Ile Thr Ile Ser Leu Phe Phe 20

<210> 245

<211> 69 <212> PRT <213> Homo sapien

<400> 245

Leu Phe Phe Gln Leu Phe Asp Thr Phe Cys Pro Arg Asp Tyr Tyr Leu 5 10 15

Ser Leu Phe Phe Phe Ser Phe Lys Thr Glu Cys Cys Ser Val Thr Gln 20 25

Val Gly Val Gln Trp His Asn Ser Ala Ser Leu Gln Pro Leu Pro Pro 35 40

Arg Leu Lys Arg Ser Ser His Leu Ser Leu Pro Ser Ser Trp Asp His 55

Arg His Ile Pro Pro 65

<210> 246

<211> 39

<212> PRT

<213> Homo sapien

<400> 246

Met Glu Thr Lys His His Ser His Lys Lys Ser Asn Ser Ile Leu Asn 5 10

His Trp Lys Val Thr Ile Pro Leu Tyr Ser Phe Pro Lys Leu Phe Val 25

Ala Lys Ser Tyr Arg Lys Glu 35

<210> 247

<211> 93

<212> PRT

<213> Homo sapien

<400> 247

Leu Leu Gln Ala Leu Lys Lys Ile Phe Phe Leu Asn Ser Leu Thr Leu 10

Ser Pro Arg Leu Glu Ala Ser Asn Val Ile Ser Ala His Cys Asn Leu 25

His Ser Arg Val Ala Gly Ile Thr Asp Met His His Pro Gln Leu 40

Ile Phe Val Phe Leu Val Glu Thr Gly Phe Arg His Val Gly Gln Ala 55

Gly Leu Ala Leu Leu Ala Leu Arg Asp Pro Pro Pro Leu Ala Phe Gln 70

Ser Ala Gly Ile Thr Gly Val Ser His Cys Thr Trp Pro

<210> 248

<211> 51

<212> PRT

<213> Homo sapien

<400> 248

Met Phe Phe Phe Phe Phe Phe Phe Leu Phe Ala Arg Phe Ser

Arg Asn Val Gly Asp Leu Trp Ala Gly Lys Pro Phe Pro Pro Gly His

Val Leu Pro Arg Tyr Pro His Leu Phe Phe Phe Phe Phe Phe Cys 40

Phe Ile Thr 50

<210> 249

<211> 62 <212> PRT

<213> Homo sapien

<400> 249

Met Asn Phe Thr Leu Ala Ile Phe His Tyr Phe Ser Leu Ser Gln Met

Ser Val Leu Met Arg Gln Leu Ala Leu Thr Gly Ala Thr Leu Met Cys

20

25

30

His Leu Pro Thr Phe Asn Phe Trp Val Lys Ala Glu Arg Glu Lys Leu 35 40 45

Met Asp Phe Ser Phe Ser Arg Arg Asp Lys Asn Gln Leu His 50 55 60

<210> 250

<211> 190

<212> PRT

<213> Homo sapien

<400> 250

Met Lys Leu Gln Leu Arg Ile Lys Ser Leu Thr Gln Asn Arg Thr Thr 1 5 10 15

Thr Trp Lys Leu Asn Asn Leu Leu Leu Asn Asp Tyr Trp Val Asn Lys 20 25 30

Lys Ile Lys Ala Glu Ile Asn Lys Phe Phe Glu Thr Ile Glu Asn Lys 35 40 45

Asp Thr Met Tyr Gln Asn Thr Ala Lys Ala Val Phe Arg Gly Lys Phe 50 55 60

Ile Ala Leu Asn Thr His Ile Arg Asn Trp Glu Ile Pro Lys Ile Asn 65 70 75 80

Val Leu Thr Ser Gln Leu Lys Glu Leu Glu Lys Arg Glu Gln Thr His 85 90 95

Ser Lys Gln Glu Ile Thr Lys Ile Ile Ala Glu Leu Lys Glu Ile Glu 100 105 110

Thr Gln Lys Ala Leu Gln Lys Ile Ser Asp Ser Arg Ser Trp Phe Phe 115 120 125

Glu Lys Ile Asn Lys Thr Asp Arg Leu Leu Ala Arg Ile Ile Lys Lys 130 135 140

Lys Arg Glu Lys Asn Gln Ile Asp Thr Ile Lys Asn Asp Lys Gly Asp 145 150 155 160

Ile Thr Thr Asn Pro Thr Glu Ile Gln Thr Ala Ile Arg Glu Cys Tyr

165

170

175

Gln His Leu Tyr Ile Asn Lys Leu Glu Asn Leu Glu Glu Ile 180 185

<210> 251

<211> 132

<212> PRT

<213> Homo sapien

<400> 251

Met Pro Val Leu Ser Pro Pro Leu His Met Pro Tyr Pro Ala Ala Lys

Leu Asp Ser Val Leu Pro Asp Lys Thr Trp Tyr Trp His Leu Tyr Ala 25

Ser Val Cys Leu Pro Ser Thr Phe Lys Lys Pro Leu Gln Ser Ala Asp 35 40

Thr Lys Lys Gln Ser His Thr Cys Ser Lys Ser Ala Cys Phe Pro Leu 50

Ile Ser Ala Ser Cys Gln Arg His Cys Leu Thr Ser Ser Ser Leu Leu 70

Ser Ile Cys Val Pro His Lys Thr Leu Arg Asp Ser Ala Ser Tyr Val 90

Tyr Gly Leu Trp Val Phe Ile Ser Thr Val Pro Cys Leu Thr Leu Ser 100 105

Pro Cys Gly Glu Tyr Thr His Pro Thr Pro Thr Val Pro Cys Thr Ser

Val Ala Ala Gln 130

<210> 252 <211> 30 <212> PRT <213> Homo sapien

<400> 252

Met Gln Phe Arg Ile His Ala Ser Phe Ser Val Lys Trp Arg Ser Tyr 5

Ser Phe Asn Ser Glu Asn Ser Gln Leu Asn Lys Gln Pro Leu

<210> 253

<211> 49

<212> PRT

<213> Homo sapien

<400> 253

Met Arg Val Val Trp Gly Trp Arg Cys Gly Cys Val Gly Val Leu Val 5 10

Leu Val Val Gly Gly Cys Val Glu Trp Ala Val Val Phe Gly Val Cys

Val Gly Cys Val Val Trp Val Gly Arg Trp Trp Cys Asp Val Val Val

Trp

<210> 254

<211> 54

<212> PRT

<213> Homo sapien

<400> 254

Met Lys Lys Ser Val Ser Cys Cys Ser Ser Leu Trp Val Ser Leu Ser 1 5

Lys Asp Glu Asn Ala Glu Val Gly Arg Gly Asp Ser Leu Leu Gly Thr 20 25

Gly Arg Cys Gly Leu Pro Ile Thr Arg Leu Lys Leu Thr Ser Leu Pro

Ser Ser Pro Thr Val Val 50

<210> 255

<211> 1088

<212> PRT <213> Homo sapien

<400> 255

Asp Asp Ser Leu Ile Ser Ser Ala Thr Ala Ile Met Glu Ala Val Val 1 5 10 15

Arg Glu Trp Ile Leu Leu Glu Lys Gly Ser Ile Glu Ser Leu Arg Thr 20 25 30

Phe Leu Leu Thr Tyr Val Leu Gln Arg Pro Asn Leu Gln Lys Tyr Val 35 40 45

Arg Glu Gln Ile Leu Leu Ala Val Ala Val Ile Val Lys Arg Gly Ser 50 55 60

Leu Asp Lys Ser Ile Asp Cys Lys Ser Ile Phe His Glu Val Ser Gln 65 70 75 80

Leu Ile Ser Ser Gly Asn Pro Thr Val Gln Thr Leu Ala Cys Ser Ile 85 90 95

Leu Thr Ala Leu Leu Ser Glu Phe Ser Ser Ser Ser Lys Thr Ser Asn 100 105

Ile Gly Leu Ser Met Glu Phe His Gly Asn Cys Lys Arg Val Phe Gln 115

Glu Glu Asp Leu Arg Gln Ile Phe Met Leu Thr Val Glu Val Leu Gln 130 135 140

Glu Phe Ser Arg Arg Glu Asn Leu Asn Ala Gln Met Ser Ser Val Phe 145 150 155 160

Gln Arg Tyr Leu Ala Leu Ala Asn Gln Val Leu Ser Trp Asn Phe Leu 165 170 175

Pro Pro Asn Leu Gly Arg His Tyr Ile Ala Met Phe Glu Ser Ser Gln 180 185 190

Asn Val Leu Leu Lys Pro Thr Glu Ser Leu Arg Glu Thr Leu Leu Asp

Ser Arg Val Met Glu Leu Phe Phe Thr Val His Arg Lys Ile Arg Glu 210 215 220

His Ser Asp Met Ala Gln Asp Ser Leu Gln Cys Leu Ala Gln Leu Ala 225 235 240

- Ser Leu His Gly Pro Ile Phe Pro Asp Glu Gly Ser Gln Val Asp Tyr 245 250 255
- Leu Ala His Phe Ile Glu Gly Leu Leu Asn Thr Ile Asn Gly Ile Glu 260 265 270
- Ile Glu Asp Ser Glu Ala Val Gly Ile Ser Ser Ile Ile Ser Asn Leu 275 280 285
- Ile Thr Val Phe Pro Arg Asn Val Leu Thr Ala Ile Pro Ser Glu Leu 290 295 300
- Phe Ser Ser Phe Val Asn Cys Leu Thr His Leu Thr Cys Ser Phe Gly 310 315 320
- Arg Ser Ala Ala Leu Glu Glu Val Leu Asp Lys Asp Asp Met Val Tyr 325 330 335
- Met Glu Ala Tyr Asp Lys Leu Leu Glu Ser Trp Leu Thr Leu Val Gln 340 345 350
- Asp Asp Lys His Phe His Lys Gly Phe Phe Thr Gln His Ala Val Gln 355 360 365
- Val Phe Asn Ser Tyr Ile Gln Cys His Leu Ala Ala Pro Asp Gly Thr 370 380
- Arg Asn Leu Thr Ala Asn Gly Val Ala Ser Arg Glu Glu Glu Glu Ile
 385 390 395 400
- Ser Glu Leu Gln Glu Asp Asp Arg Asp Gln Phe Ser Asp Gln Leu Ala 405 410 415
- Ser Val Gly Met Leu Gly Arg Ile Ala Ala Glu His Cys Ile Pro Leu 420 425 430
- Leu Thr Ser Leu Leu Glu Glu Arg Val Thr Arg Leu His Gly Gln Leu 435 440 445
- Gln Arg His Gln Gln Gln Leu Leu Ala Ser Pro Gly Ser Ser Thr Val
 450 455 460
- Asp Asn Lys Met Leu Asp Asp Leu Tyr Glu Asp Ile His Trp Leu Ile 465 470 475 480

- Leu Val Thr Gly Tyr Leu Leu Ala Asp Asp Thr Gln Gly Glu Thr Pro 485 490 495
- Leu Ile Pro Pro Glu Ile Met Glu Tyr Ser Ile Lys His Ser Ser Glu 500 505 510
- Val Asp Ile Asn Thr Thr Leu Gln Ile Leu Gly Ser Pro Gly Glu Lys
 515 520 525
- Ala Ser Ser Ile Pro Gly Tyr Asn Arg Thr Asp Ser Val Ile Arg Leu 530 530 540
- Leu Ser Ala Ile Leu Arg Val Ser Glu Val Glu Ser Arg Ala Ile Arg 545 550 555 560
- Ala Asp Leu Thr His Leu Leu Ser Pro Gln Met Gly Lys Asp Ile Val 565 575
- Trp Phe Leu Lys Arg Trp Ala Lys Thr Tyr Leu Leu Val Asp Glu Lys 580 585 590
- Leu Tyr Asp Gln Ile Ser Leu Pro Phe Ser Thr Ala Phe Gly Ala Asp 595 600 600
- Thr Glu Gly Ser Gln Trp Ile Ile Gly Tyr Leu Leu Gln Lys Val Ile 610 $$ 620
- Ser Asn Leu Ser Val Trp Ser Ser Glu Gln Asp Leu Ala Asn Asp Thr 625 630 635 640
- Val Gln Leu Leu Val Thr Leu Val Glu Arg Arg Glu Arg Ala Asn Leu 645 650 655
- Val Ile Gln Cys Glu Asn Trp Trp Asn Leu Ala Lys Gln Phe Ala Ser 660 665 670
- Arg Ser Pro Pro Leu Asn Phe Leu Ser Ser Pro Val Gln Arg Thr Leu 675 680 685
- Met Lys Ala Leu Val Leu Gly Gly Phe Ala His Met Asp Thr Glu Thr 690 695 700
- Lys Gln Gln Tyr Trp Thr Glu Val Leu Gln Pro Leu Gln Gln Arg Phe

Leu Arg Val Ile Asn Gln Glu Asn Phe Gln Gln Met Cys Gln Gln Glu

Glu Val Lys Gln Glu Ile Thr Ala Thr Leu Glu Ala Leu Cys Gly Ile 745

Ala Glu Ala Thr Gln Ile Asp Asn Val Ala Ile Leu Phe Asn Phe Leu

Met Asp Phe Leu Thr Asn Cys Ile Gly Leu Met Glu Val Tyr Lys Asn

Thr Pro Glu Thr Val Asn Leu Ile Ile Glu Val Phe Val Glu Val Ala 795

His Lys Gln Ile Cys Tyr Leu Gly Glu Ser Lys Ala Met Asn Leu Tyr

Glu Ala Cys Leu Thr Leu Leu Gln Val Tyr Ser Lys Asn Asn Leu Gly

Arg Gln Arg Ile Asp Val Thr Ala Glu Glu Glu Gln Tyr Gln Asp Leu

Leu Leu Ile Met Glu Leu Leu Thr Asn Leu Leu Ser Lys Glu Phe Ile 860

Asp Phe Ser Asp Thr Asp Glu Val Phe Arg Gly His Glu Pro Gly Gln

Ala Ala Asn Arg Ser Val Ser Ala Ala Asp Val Val Leu Tyr Gly Val 890

Asn Leu Ile Leu Pro Leu Met Ser Gln Asp Leu Leu Lys Phe Pro Thr

Leu Cys Asn Gln Tyr Tyr Lys Leu Ile Thr Phe Ile Cys Glu Ile Phe 920

Pro Glu Lys Ile Pro Gln Leu Pro Glu Asp Leu Phe Lys Ser Leu Met 935

Tyr Ser Leu Glu Leu Gly Met Thr Ser Met Ser Ser Glu Val Cys Gln 945 955 955 960

Leu Cys Leu Glu Ala Leu Thr Pro Leu Ala Glu Gln Cys Ala Lys Ala 965 970 975

Gln Glu Thr Asp Ser Pro Leu Phe Leu Ala Thr Arg His Phe Leu Lys 980 985 990

Leu Val Phe Asp Met Leu Val Leu Gln Lys His Asn Thr Glu Met Thr 995 1000 1005

Thr Ala Ala Gly Glu Ala Phe Tyr Thr Leu Val Cys Leu His Gln
1010 1015 1020

Ala Glu Tyr Ser Glu Leu Val Glu Thr Leu Leu Ser Ser Gln Gln
1025 1030 1035

Thr Ala Ser Ser Thr Pro Pro Thr Leu Asp Arg Lys Gln Lys Met 1055

Ala Phe Leu Lys Ser Leu Glu Glu Phe Met Ala Asn Val Gly Gly 1070

Leu Leu Cys Val Lys 1085

<210> 256

<211> 78

<212> PRT

<213> Homo sapien

<400> 256

Met Val Leu Met Thr Ser Ser Gly Gln Pro Ser Cys Pro Gly Ile Met 1 5 10 15

Ala Cys Gln His Ser Leu Cys Pro Pro Asn Leu Arg Pro Arg Met Arg 20 25 30

Ser Cys Gln His Asn Ile His Pro Phe Glu Gln Met Glu Ser Gly Thr 35 40 45

Leu Thr Gln Pro Ser Val Leu Asn Asn Thr Ala Ile Ile Ala Thr Trp 50 55 60

Leu Ser Arg Gln Cys Lys Pro Ser Glu Ser Ala Glu Leu Phe 65 70 75

<210> 257

<211> 595

<212> PRT

<213> Homo sapien

<400> 257

Val Gln Lys Thr Asn Gln Cys Leu Gln Gly Gln Ser Leu Lys Thr Ser 1 5 10 15

Leu Thr Leu Lys Val Asp Arg Gly Ser Glu Glu Thr Tyr Arg Pro Glu 20 25 30

Phe Pro Ser Thr Lys Gly Leu Val Arg Ser Leu Ala Glu Gln Phe Gln 35 40 45

Arg Met Gln Gly Val Ser Met Arg Asp Ser Thr Gly Phe Lys Asp Arg 50 55 60

Ser Leu Ser Gly Ser Leu Arg Lys Asn Ser Ser Pro Ser Asp Ser Lys 65 70 75 80

Pro Pro Phe Ser Gln Gly Gln Glu Lys Gly His Trp Pro Trp Ala Lys 90 95

Gln Gln Ser Ser Leu Glu Gly Gly Asp Arg Pro Leu Ser Trp Glu Glu 100 105 110

Ser Thr Glu His Ser Ser Leu Ala Leu Asn Ser Gly Leu Pro Asn Gly 115 120 125

Glu Thr Ser Ser Gly Gly Gln Pro Arg Leu Ala Glu Pro Asp Ile Tyr 130 135 140

Gln Glu Lys Leu Ser Gln Val Arg Asp Val Arg Ser Lys Asp Leu Gly
145 150 155 160

Ser Ser Thr Asp Leu Gly Thr Ser Leu Pro Leu Asp Ser Trp Val Asn 165 170 175

Ile Thr Arg Phe Cys Asp Ser Gln Leu Lys His Gly Ala Pro Arg Pro 180 185 190

Gly Met Lys Ser Ser Pro His Asp Ser His Thr Cys Val Thr Tyr Pro 195 200 205

Glu Arg Asn His Ile Leu Leu His Pro His Trp Asn Gln Asp Thr Glu 210 215 220

Gln Glu Thr Ser Glu Leu Glu Ser Leu Tyr Gln Ala Ser Leu Gln Ala 225 230 235 240

Ser Gln Ala Gly Cys Ser Gly Trp Gly Gln Gln Asp Thr Ala Trp His 245 250 255

Pro Leu Ser Gln Thr Gly Ser Ala Asp Gly Met Gly Arg Arg Leu His 260 265 270

Ser Ala His Asp Pro Gly Leu Ser Lys Thr Ser Thr Ala Glu Met Glu 275 280 285

His Gly Leu His Glu Ala Arg Thr Val Arg Thr Ser Gln Ala Thr Pro 290 295 300

Cys Arg Gly Leu Ser Arg Glu Cys Gly Glu Asp Glu Gln Tyr Ser Ala 305 310 315 320

Glu Asn Leu Arg Arg Ile Ser Arg Ser Leu Ser Gly Thr Val Val Ser 325 330 335

Glu Arg Glu Glu Ala Pro Val Ser Ser His Ser Phe Asp Ser Ser Asn 340 345 350

Val Arg Lys Pro Leu Glu Thr Gly His Arg Cys Ser Ser Ser Ser Ser Ser Ser 355

Leu Pro Val Ile His Asp Pro Ser Val Phe Leu Leu Gly Pro Gln Leu 370 380

Tyr Leu Pro Gln Pro Gln Phe Leu Ser Pro Asp Val Leu Met Pro Thr 385 390 395 400

Met Ala Gly Glu Pro Asn Arg Leu Pro Gly Thr Ser Arg Ser Val Gln 405 410 415

Gln Phe Leu Ala Met Cys Asp Arg Gly Glu Thr Ser Gln Gly Ala Lys 420 425 430

Tyr Thr Gly Arg Thr Leu Asn Tyr Gln Ser Leu Pro His Arg Ser Arg 435 440 445

Thr Asp Asn Ser Trp Ala Pro Trp Ser Glu Thr Asn Gln His Ile Gly 450 455 460

Thr Arg Phe Leu Thr Thr Pro Gly Cys Asn Pro Gln Leu Thr Tyr Thr 465 470 475 480

Ala Thr Leu Pro Glu Arg Ser Lys Gly Leu Gln Val Pro His Thr Gln 485 490 495

Ser Trp Ser Asp Leu Phe His Ser Pro Ser His Pro Pro Ile Val His 500 500 500 500 500

Pro Val Tyr Pro Pro Ser Ser Leu His Val Pro Leu Arg Ser Ala 515 520 525

Trp Asn Ser Asp Pro Val Pro Gly Ser Arg Thr Pro Gly Pro Arg Arg 530 540

Val Asp Met Pro Pro Asp Asp Asp Trp Arg Gln Ser Ser Tyr Ala Ser 545 550 555 560

His Ser Gly His Arg Arg Thr Val Gly Glu Gly Phe Leu Phe Val Leu 565 570 575

Ser Asp Ala Pro Arg Arg Glu Gln Ile Arg Ala Arg Val Leu Gln His 580 585 590

Ser Gln Trp 595

<210> 258

<211> 55

<212> PRT

<213> Homo sapien

<400> 258

Met Thr Val Met Ile Leu Leu Phe Lys Lys Asn Pro Asn Cys Tyr Phe 1 5 10 10 15

Asp Leu Tyr Asp Leu Thr Leu Asn His Gly Ser Ile Thr Met Met Phe 20 25 30

Lys Thr Leu Ile Asp Ser Thr Cys Phe Lys Asn Ser Gln Ile Pro Ser 35 40 45

Ala Phe Ile Ile Arg Asp Arg 50 55

<210> 259

<211> 43

<212> PRT

<213> Homo sapien

<400> 259

Met Met Leu Thr Met Glu Phe Lys Asn Lys Gln Gln His Phe Val Val 1 5

Ser Thr Gly Val Gly Val Glu Glu Leu Gln Arg His His Gly Asn Lys 20 25 30

Ser Leu Pro Arg Ile Ser Gly Pro Arg Asn Leu 35 40

<210> 260

<211> 75

<212> PRT

<213> Homo sapien

<400> 260

Met Ala Tyr Arg Met Lys Arg Gly Thr Arg Asn Pro Cys Gly Arg Gly 1 5 10 15

Leu Asp Leu Lys Gln Cys Pro Leu Trp Leu Leu Leu Pro Trp Leu Thr 20 25 30

Gly Phe Leu Asp His Val His Phe Thr Gly Pro Trp Asp Leu His Leu 35 40 45

Leu Ala Ser Pro Ala Gly Leu Ile Pro Ala Arg Ala Pro Ser Phe Leu 50 55 60

Leu Met Val Phe Arg Trp Pro Asp His Gly Lys 75

<210> 261 <211> 218

<212> PRT

<213> Homo sapien

<400> 261

Met Ile Asn His Leu Ser Pro His Gln Ala Ala Ala Pro Val Asp Gln 1 5 10 15

Thr Pro Arg Thr Leu Ala Thr Met Gly Gln Arg Ala Leu Pro Ser Ser 20 25 30

Leu Ala Leu Leu Ser Arg Pro Leu Ser Pro Pro Pro Ala Ala Cys Ser 35 40 45

Gly Asp Pro Gly Cys Gly Ser Gly Ala Gly Leu Pro Ser Ala Ser Ala 50 55 60

Ala Ala Gly Ile Ala Ser Ser Ala Val Glu Ala Val Cys Gly Asp Ala 65 70 75 80

Ala Pro Ala Cys Leu Leu Arg Thr Pro Leu Arg Gly Leu Leu Lys Pro 85 90 95

Thr Gly Pro Arg Ser Thr Met Glu Cys Pro Pro Ala Leu Ile Val Gln
100 105 110

Pro Pro Ala Gly Gly Met Ala Arg Arg Ala Ala Ser Gln Pro Trp Ala 115 120 125

Ala Ala Ser Ala Thr Pro Met Leu Ser Ser Lys Ala Ser Leu Cys Ile 130 $$135\$

Arg Ser His Trp Pro Ile Pro His Pro Ala Ser Thr Ala Cys Pro Ala 165 170 175

Pro Leu Pro Val Val Leu Val Ala Pro Arg Ser Thr Ile Leu Ser Met 180 $$185\$

Ser Arg Thr Trp Thr Cys Arg Arg Trp Ala Val Ala Pro Cys Arg Ala 195 200 205

Glu Lys Leu Met Cys Ser Ser Ser Arg Ser 210 215

<210> 262 <211> 104 <212> PRT <213> Homo sapien

<400> 262

Met Pro Ser Phe Phe Cys Phe Ser Ile Ser Leu Ile Arg Asp Trp Lys 5

Val Ser Ile Arg Ser Asn Thr Asp Phe Ile Val Ile Gly Thr Asn Cys 20 25

Ser Pro Thr Thr Pro Tyr Ser Ala Ser Ser Ile Thr Leu Leu Cys Glu 40

Ile Leu Arg Asn Gly Leu Pro Leu Gln Gly Leu Asn Leu Pro Tyr Leu

Arg Phe Glu Ser Ser Val Leu Phe Cys Ile Cys Phe Lys Tyr Leu Gly

Ser Val Thr His Ala Asn Met Thr Cys Pro Val Gln Ala Thr Leu Gly

Ile His Ile Ser His Val Ser Ser 100

<210> 263

<211> 260 <212> PRT <213> Homo sapien

<400> 263

Glu Lys Lys Lys Met Lys Asn Glu Asn Ala Asp Lys Leu Leu Lys

Ser Glu Lys Gln Met Lys Lys Ser Glu Lys Lys Ser Lys Gln Glu Lys

Glu Lys Ser Lys Lys Lys Gly Gly Lys Thr Glu Gln Asp Gly Tyr 35 40

Gln Lys Pro Thr Asn Lys His Phe Thr Gln Ser Pro Lys Lys Ser Val

50

60

Ala Asp Leu Leu Gly Ser Phe Glu Gly Lys Arg Arg Leu Leu Leu Ile 65 70 75 80

55

Thr Ala Pro Lys Ala Glu Asn Asn Met Tyr Val Gln Gln Arg Asp Glu 85 90 95

Tyr Leu Glu Ser Phe Cys Lys Met Ala Thr Arg Lys Ile Ser Val Ile

Thr Ile Phe Gly Pro Val Asn Asn Ser Thr Met Lys Ile Asp His Phe 115 120 125

Gln Leu Asp Asn Glu Lys Pro Met Arg Val Val Asp Asp Glu Asp Leu 130 135 140

Val Asp Gln Arg Leu Ile Ser Glu Leu Arg Lys Glu Tyr Gly Met Thr 145 150 155 160

Tyr Asn Asp Phe Phe Met Val Leu Thr Asp Val Asp Leu Arg Val Lys

Gln Tyr Tyr Glu Val Pro Ile Thr Met Lys Ser Val Phe Asp Leu Ile 180 185 190

Asp Thr Phe Gln Ser Arg Ile Lys Asp Met Glu Lys Gln Lys Lys Glu 195 200 205

Gly Ile Val Cys Lys Glu Asp Lys Lys Gln Ser Leu Glu Asn Phe Leu 210 215 220

Ser Arg Phe Arg Trp Arg Arg Leu Leu Val Ile Ser Ala Pro Asn 235 235 240

Asp Glu Asp Trp Ala Tyr Ser Gln Gln Leu Ser Ala Leu Ser Gly Gln 245 250 255

Ala Cys Thr Leu 260

<210> 264

<211> 62

<212> PRT

<213> Homo sapien

<400> 264

Met Ser Gly Phe Ile Tyr Val Leu Glu Lys Asp His Leu Lys Lys Ile

Asn Thr Phe Ser Thr Thr Lys Lys Lys Lys Lys Lys Lys Lys Lys 20 25 30

Arg Arg Gly Glu Pro Gly Ala Gln Ser Gly Pro Arg Gly Ala Asn 35

Trp Val Leu Pro Ala His Ile Pro Pro Lys Tyr Trp His Thr 55 60

<210> 265

<211> 89

<212> PRT

<213> Homo sapien

<400> 265

Met Leu Gln Leu Asn Thr Arg Phe Tyr Phe Leu Ser Asn Cys Gly Phe 10

Val Phe Ile Tyr His Pro Leu Phe Ile Pro Phe Leu Thr His Thr Leu 20 25

Cys Arg Ala Ser Gly Ile Tyr Tyr Ser Thr Val Cys Leu Cys Lys Arg 35 40 45

Leu Ser Val Leu Ala Ser Thr Tyr Glu Arg Met His Ala Lys Phe Cys 50 55

Leu Ser Met Pro Gly Leu Ile Ser Leu Lys Gln Asn Asp Leu Arg Val 70 75

Pro Ser Met Leu Phe Ile Leu Pro Asn 85

<210> 266 <211> 38 <212> PRT <213> Homo sapien

Met Thr Ser Arg Trp Leu Asn Phe Ser Cys Leu Trp Cys Phe Gly Pro 5 10 15

Asn Ser Thr Gly Gln His His Asp His Met Glu Thr Tyr Phe Trp Lys 20 25 30

Gln Asn Phe Asn Phe Ile 35

<210> 267

<211> 111

<212> PRT

<213> Homo sapien

<400> 267

Asn Asp Leu Asp Arg Tyr Asn Pro Leu Ser Ser Gln Arg Leu Val Arg 1 5 10 15

Asn Ala Leu Ala His Val Gly Ala Lys Glu Arg Glu Leu Ser Trp Ala 20 25 30

His Ser Glu Ser Phe Ala Ala Leu Cys Arg Tyr Gly Lys Arg Glu Phe 35 40 45

Lys Ile Gly Gly Glu Leu Arg Ile Gly Lys Gln Pro Tyr Arg Leu Gln 50 55 60

Ile Gln Leu Ser Ala Gln Arg Ser His Thr Leu Glu Phe Gln Ser Leu 65 70 75 80

Glu Asp Leu Ile Met Gly Glu Ala Thr Gln Arg Pro Arg Ser Gly Ala 85 90 95

Arg Pro Val Leu Gln Glu Leu Ala Thr His Leu His Pro Ala Glu 100 105 110

<210> 268

<211> 60

<212> PRT

<213> Homo sapien

<400> 268

Met Val Asn Thr Val Leu Leu Ser Leu Lys Ile Ser Leu Phe Cys Pro $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15 \hspace{1cm} 15$

His Gln Leu Phe Tyr Cys Ser Val Leu Arg Lys Pro Asn Ser Cys Val 20 25 30

Phe Phe Pro Ser Leu Leu Ile Leu Ser Cys Val Pro Ser Gly Lys Cys 35 40 45

His Tyr Phe Leu Asp Ile Leu Asn Leu Leu Phe Leu 50 55 60

<210> 269

<211> 72

<212> PRT

<213> Homo sapien

<400> 269

Met Cys Leu Cys Ile Leu Val Ser Lys Leu Arg Thr Ser Asp Glu Leu 1 5 10 15

Pro Val Val Pro Ser Tyr Cys Arg Arg Leu Glu Val Arg Gly Ile Ser 20 25 30

Ala Ser Thr Arg Glu Ala Glu Val Ala Ser Glu Pro Thr Ile Met Thr 35 40 45

Ala Cys Thr Pro Ser Leu Ala Thr Val Arg Glu Leu Leu Ser Gln Ile 50 55 60

Lys Arg Lys Gln Ser Leu Leu Ser 65 70

<210> 270

<211> 152

<212> PRT

<213> Homo sapien

<400> 270

Gly Ser Leu Gly Gly Glu Pro Gly Val Ser Cys Leu Lys Met His Ser 1 10 15

Asp Ala Ala Val Asn Phe Gln Leu Asn Ser His Leu Ser Thr Leu 20 25 30

Ala Asn Ile His Lys Ile Tyr His Thr Leu Asn Lys Leu Asn Leu Thr 35 40 45

Glu Asp Ile Gly Gln Asp Asp His Gln Thr Gly Ser Leu Arg Ser Cys
50 60

Ser Ser Ser Asp Cys Phe Asn Lys Val Met Pro Pro Arg Lys Lys Arg 65 70 75 80

Arg Pro Ala Ser Gly Asp Asp Leu Ser Ala Lys Lys Ser Arg His Asp 85 90 95

Ser Met Tyr Arg Lys Tyr Asp Ser Thr Arg Ile Lys Thr Glu Glu Glu 100 105 110

Ala Phe Ser Ser Lys Arg Cys Leu Glu Trp Phe Tyr Glu Tyr Ala Gly
115 120 125

Thr Asp Asp Val Val Gly Pro Glu Gly Met Glu Lys Phe Cys Glu Asp 130 135 140

Ile Gly Val Glu Pro Glu Asn Val 145 150

<210> 271

<211> 52

<212> PRT

<213> Homo sapien

<400> 271

Met Glu Pro His Ile Met Lys Phe Asn Ser His Val Lys Thr Phe Cys 1 5 10 15

Ile Val Gly Cys Gln Lys Tyr Leu Pro Lys Leu Ser Phe Asp Leu Ser 20 25 30

Glu Trp Gly Trp Leu Leu Pro Ile Leu Gln Phe Val Ser Gln Ala Trp 35 40 45

Arg Asn Gln Ala

<210> 272

<211> 449

<212> PRT

<213> Homo sapien

<400> 272

Met Val Met Glu Lys Pro Ser Pro Leu Leu Val Gly Arg Glu Phe Val $1 ag{5} ag{5}$

Arg Gln Tyr Tyr Thr Leu Leu Asn Lys Ala Pro Glu Tyr Leu His Arg

30

Phe Tyr Gly Arg Asn Ser Ser Tyr Val His Gly Gly Val Asp Ala Ser 35 40 45

Gly Lys Pro Gln Glu Ala Val Tyr Gly Gln Asn Asp Ile His His Lys 50 55 60

Val Leu Ser Leu Asn Phe Ser Glu Cys His Thr Lys Ile Arg His Val 65 70 75 80

Asp Ala His Ala Thr Leu Ser Asp Gly Val Val Val Gln Val Met Gly 85 90 95

Leu Leu Ser Asn Ser Gly Gln Pro Glu Arg Lys Phe Met Gln Thr Phe 100 105 110

Val Leu Ala Pro Glu Gly Ser Val Pro Asn Lys Phe Tyr Val His Asn 115 120 125

Asp Met Phe Arg Tyr Glu Asp Glu Val Phe Gly Asp Ser Glu Pro Glu 130 135 140

Gln Pro Ser Pro Glu Pro Val Gln Glu Asn Ala Asn Ser Gly Tyr Tyr 165 170 175

Glu Ala His Pro Val Thr Asn Gly Ile Glu Glu Pro Leu Glu Glu Ser 180 185 190

Ser His Glu Pro Glu Pro Glu Pro Glu Ser Glu Thr Lys Thr Glu Glu 195 200 205

Leu Lys Pro Gln Val Glu Glu Lys Asn Leu Glu Glu Leu Glu Glu Lys 210 215 220

Ser Thr Thr Pro Pro Pro Ala Glu Pro Val Ser Leu Pro Gln Glu Pro 225 235 240

Pro Lys Pro Arg Val Glu Ala Lys Pro Glu Val Gln Ser Gln Pro Pro 245 250 255

Arg Val Arg Glu Gln Arg Pro Arg Glu Arg Pro Gly Phe Pro Pro Arg 265

Gly Pro Arg Pro Gly Arg Gly Asp Met Glu Gln Asn Asp Ser Asp Asn

Arg Arg Ile Ile Arg Tyr Pro Asp Ser His Gln Leu Phe Val Gly Asn

Leu Pro His Asp Ile Asp Glu Asn Glu Leu Lys Glu Phe Phe Met Ser 310 315

Phe Gly Asn Val Val Glu Leu Arg Ile Asn Thr Lys Gly Val Gly Gly 330

Lys Leu Pro Asn Phe Gly Phe Val Val Phe Asp Asp Ser Glu Pro Val 345

Gln Arg Ile Leu Ile Ala Lys Pro Ile Met Phe Arg Gly Glu Val Arg 360

Leu Asn Val Glu Glu Lys Lys Thr Arg Ala Ala Arg Glu Arg Glu Thr

Arg Gly Gly Asp Asp Arg Arg Asp Ile Arg Arg Asn Asp Arg Gly 385 390

Pro Gly Gly Pro Arg Gly Ile Val Gly Gly Met Met Arg Asp Arg 405 410

Asp Gly Arg Gly Pro Pro Pro Arg Gly Gly Met Ala Gln Lys Leu Gly 420 425

Ser Gly Arg Gly Thr Gly Gln Met Glu Gly Arg Phe Thr Gly Gln Arg 435

Arg

<210> 273

<211> 63 <212> PRT

<213> Homo sapien

<400> 273

Met Cys Cys Asp Val Ser Glu Arg Ala Glu Phe Arg Leu Val Ser Ala 10

Arg Cys Ser Phe Ser His Pro Arg Thr Val Ala Arg Leu Leu Leu Arg. 25

His Pro Gly Gln Leu Pro Leu Pro Phe Gln Trp Gly Leu Thr Trp Leu

Pro Ser Leu Ala Ala Asn Arg Arg Ala Pro Gln His Ser Arg Ser

<210> 274

<211> 60 <212> PRT <213> Homo sapien

<400> 274

Met Asp Pro Gly Arg Tyr Cys Leu Val Leu Gln Glu Leu Met Gln Phe

His Ser Glu Ala Cys Lys Ile Leu Asn Phe Arg Asp Asn Arg Pro Asp

Thr Phe Leu Ile Ser Phe Tyr Ser Leu Met Ser Asn Asn Thr Ile Phe

Lys Asn Met Val Leu Ile Cys Leu Ala Ser Asn Leu 55

<210> 275

<211> 111

<212> PRT

<213> Homo sapien

<400> 275

Lys Leu Ile Val Tyr Pro Pro Pro Pro Ala Lys Gly Gly Ile Ser Val

Thr Asn Glu Asp Leu His Cys Leu Asn Glu Gly Glu Phe Leu Asn Asp 20

Val Ile Ile Asp Phe Tyr Leu Lys Tyr Leu Val Leu Glu Lys Leu Lys 40

Lys Glu Asp Ala Asp Arg Ile His Ile Phe Ser Ser Phe Phe Tyr Lys

50

55

60

Arg Leu Asn Gln Arg Glu Arg Asn His Glu Thr Thr Asn Leu Ser 70

Ile Gln Gln Lys Arg His Gly Arg Val Lys Thr Trp Thr Arg His Val

Asp Ile Phe Glu Lys Asp Phe Ile Phe Val Pro Leu Asn Glu Ala 105

<210> 276

<211> 97 <212> PRT <213> Homo sapien

<400> 276

Met Ser Gln Asp Thr Ser Arg Ser Gln Glu Arg Ala Ala Gly Pro Gln 10

Arg Thr Arg Arg Arg Pro Arg Thr Trp Ser Gly Gly Val Glu Pro Thr 20 25

Ala Ala Ala Pro Trp Ala Ala Ala Met Ala His Thr Gly Arg His Gly

Ser Gly Ala Ala Thr Ala Ser Ser Thr Arg Gly Asp Gly Ala Ala 55 60

Arg Arg Gly Ala Ala Arg Gly Thr Asp Ala Ala Glu Arg Arg Ala 70

Ala Ser Arg Gly Ala Ala Glu Pro Lys Ala Thr Ala Ser Gly Gly

Gly

<210> 277

<211> 76

<212> PRT <213> Homo sapien

<400> 277

Met Gly Ser Cys Pro Leu Trp Val Arg Ser Ser Thr Cys Arg Val Glu 10

Val Gly Tyr Val His Thr Phe Asn Asp Asn Leu His Ile Ser Ala Pro 25

Thr Gly Pro Lys Leu Phe Leu Gly Phe Lys Val Val Cys Leu Phe 40

Phe Ser Phe Phe Phe Phe Phe Phe Phe Gly Glu Val Glu Phe Gly

Ser Gly Trp Pro Arg Cys Gly Val Cys Lys Gly Arg

<210> 278

<211> 20

<212> PRT

<213> Homo sapien

<400> 278

Met Glu Asp Gln Ile Ile Leu Asn Tyr Ile Ser Ile Val Pro Gly Lys 5

Thr Gln Val Leu 20

<210> 279

<211> 24

<212> PRT

<213> Homo sapien

<400> 279

Met Val His Leu Met His Ala Arg Ala Arg Ala Ser Cys Asp Gly Cys 5

Val Val Ala Ala Glu Val His Val 20

<210> 280

<211> 101

<212> PRT <213> Homo sapien

<400> 280

Leu Phe Phe Phe Lys Lys Phe Ile Leu Arg Trp Ser Leu Thr Leu Ser 10

Leu Arg Leu Glu Cys Ser Asp Ser Ile Ser Ala His Cys Asn Leu Arg 20 25 30

Leu Pro Gly Leu Ser Asn Phe Cys Ala Ser Ala Ser Gln Val Ser Glu 35 40 45

Ile Thr Gly Val Cys His His Thr Gln Leu Phe Phe Ile Phe Tyr Phe 50 55 60

Ala Ala Lys Met Gly Phe Arg His Val Gly Arg Thr Gly Leu Glu Leu 65 70 75 80

Leu Ala Ser Ser Gly Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile 85 90 95

Thr Gly Val Ser His 100

<210> 281

<211> 43

<212> PRT

<213> Homo sapien

<400> 281

Met Trp Gly His Gly Leu Asp Asp Gly Leu His Arg Ser Phe His Leu 1 5 10 15

Cys Glu Ser Lys Ser Gly Gln Ser Ala Arg Thr Gln Ser Leu Thr Leu 20 25 30

Gly Gln Leu Leu Arg Thr Asn Pro Gln His Leu 35

<210> 282

<211> 46

<212> PRT

<213> Homo sapien

<400> 282

Met Ala Gly Asn Ile His Pro Gly Thr Phe Gly Pro Gly Ser Pro His 1 5 10 15

Leu Phe Phe Leu Cys Gly Val Val Ala Phe Phe Leu Phe Ile Val Ala

Arg Glu Ala Lys Ile Tyr Ser Phe Ser Met Asn Pro Asn Met

35 40 45

<210> 283

<211> 70

<212> PRT

<213> Homo sapien

<400> 283

Met Pro Gly Ser His Leu Cys Met Phe Asn Thr Val Thr His Asp Val 10

Ile Thr Glu Trp Arg Arg Trp Lys Gly Pro Cys Arg Ser Phe Ser Trp

His Pro Asn Phe Thr Glu Gly Glu Leu Arg Pro Glu Leu Arg Asp Val

Leu Arg Ile Pro Glu Ser His Ser Ser Val Arg Ser Val Ile His Lys 50

Glu Val Ile Ile Lys Val

<210> 284

<211> 49 <212> PRT

<213> Homo sapien

<400> 284

Met Ser Ser Leu Phe Ala Phe Leu Leu Thr Tyr Phe Val Val Phe

Lys Asp Cys Ala Gly Asp Ile Leu Glu Gly Ile Asn Gly Leu His Ser

Lys Arg Cys Gly Leu Ser Lys Leu Phe Ser Val Phe Ile Thr Glu Thr 40

Asp

<210> 285

<211> 1544 <212> PRT

<213> Homo sapien

<400> 285

Ser Asp Ser Asn 15

Ser Glu Lys Glu 30

rrp Leu Ala Thr

Ger Ser His Cys

sn Leu Arg Gly 80

ro Tyr Gln Lys 95

rp Ile Gln Tyr 110

ly Ala Gln Val 25

su Ile Ser Tyr

in Arg His Trp

y Ile Trp Thr

y Gln Val Ile 190

u Leu His Glu

e Phe Leu Val

r Ala Pro Pro 240

- Gln Asp Gly Pro Ala Ala Tyr Pro Ile Pro Val Gln Asn Ile Lys Pro 245 250255
- Leu Leu Thr Val Ser Phe Thr Ser Gly Asp Ile Ser Leu Met Asn Asn 260 265 270
- Tyr Asp Asp Leu Ser Pro Thr Val Ile Arg Ser Gly Leu Lys Glu Val 275 280 285
- Val Ala Gln Trp Cys Thr Gln Gly Asp Leu Leu Ala Val Ala Gly Met 290 295 300
- Glu Arg Gln Thr Gln Leu Gly Glu Leu Pro Asn Gly Pro Leu Leu Lys 305 310 315 320
- Leu Asp Thr Leu Val Gln Arg Pro Ile Ile Ser Ile Cys Trp Gly His 340 345 350
- Arg Asp Ser Arg Leu Leu Met Ala Ser Gly Pro Ala Leu Tyr Val Val 355 360 365
- Arg Val Glu His Arg Val Ser Ser Leu Gln Leu Leu Cys Gln Gln Ala 370 375 380
- Ile Ala Ser Thr Leu Arg Glu Asp Lys Asp Val Ser Lys Leu Thr Leu 385 390 395 400
- Pro Pro Arg Leu Cys Ser Tyr Leu Ser Thr Ala Phe Ile Pro Thr Ile 405 410 415
- Lys Pro Pro Ile Pro Asp Pro Asn Asn Met Arg Asp Phe Val Ser Tyr 420 425 430
- Pro Ser Ala Gly Asn Glu Arg Leu His Cys Thr Met Lys Arg Thr Glu 435 440 445
- Asp Asp Pro Glu Val Gly Gly Pro Cys Tyr Thr Leu Tyr Leu Glu Tyr 450 455 460
- Leu Gly Gly Leu Val Pro Ile Leu Lys Gly Arg Arg Ile Ser Lys Leu

Arg Pro Glu Phe Val Ile Met Asp Pro Arg Thr Asp Ser Lys Pro Asp Glu Ile Tyr Gly Asn Ser Leu Ile Ser Thr Val Ile Asp Ser Cys Asn Cys Ser Asp Ser Ser Asp Ile Glu Leu Ser Asp Asp Trp Ala Ala Lys Lys Ser Pro Lys Ile Ser Arg Ala Ser Lys Ser Pro Lys Leu Pro Arg Ile Ser Ile Glu Ala Arg Lys Ser Pro Lys Leu Pro Arg Ala Ala Gln Glu Leu Ser Arg Ser Pro Arg Leu Pro Leu Arg Lys Pro Ser Val Gly Ser Pro Ser Leu Thr Arg Arg Glu Phe Pro Phe Glu Asp Ile Thr Gln His Asn Tyr Leu Ala Gln Val Thr Ser Asn Ile Trp Gly Thr Lys Phe Lys Ile Val Gly Leu Ala Ala Phe Leu Pro Thr Asn Leu Gly Ala Val Ile Tyr Lys Thr Ser Leu Leu His Leu Gln Pro Arg Gln Met Thr Ile Tyr Leu Pro Glu Val Arg Lys Ile Ser Met Asp Tyr Ile Asn Leu Pro Val Phe Asn Pro Asn Val Phe Ser Glu Asp Glu Asp Asp Leu Pro Val Thr Gly Ala Ser Gly Val Pro Glu Asn Ser Pro Pro Cys Thr Val Asn

Ile Pro Ile Ala Pro Ile His Ser Ser Ala Gln Ala Met Ser Pro Thr

Gln Ser Ile Gly Leu Val Gln Ser Leu Leu Ala Asn Gln Asn Val Gln 705 710 715 720

Leu Asp Val Leu Thr Asn Gln Thr Thr Ala Val Gly Thr Ala Glu His
725 730 735

Ala Gly Asp Arg Cys His Pro Val Thr Gln Val Ser Asn Arg Tyr Ser 740 745 750

Asn Pro Gly Gln Val Ile Phe Gly Ser Val Glu Met Gly Arg Ile Ile 755 760 765

Gln Asn Pro Pro Pro Leu Ser Leu Pro Pro Pro Pro Gln Gly Pro Met 770 780

Gln Leu Ser Thr Val Gly His Gly Asp Arg Asp His Glu His Leu Gln 785 790 795 800

Lys Ser Ala Lys Ala Leu Arg Pro Thr Pro Gln Leu Ala Ala Glu Gly 805 810 815

Asp Ala Val Val Phe Ser Ala Pro Gln Glu Val Gln Val Thr Lys Ile 820 825 830

Asn Pro Pro Pro Pro Tyr Pro Gly Thr Ile Pro Ala Ala Pro Thr Thr 835 840 845

Ala Ala Pro Pro Pro Pro Leu Pro Pro Pro Gln Pro Pro Val Asp Val 850 855 860

Cys Leu Lys Lys Gly Asp Phe Ser Leu Tyr Pro Thr Ser Val His Tyr 865 870 875 880

Gln Thr Pro Leu Gly Tyr Glu Arg Ile Thr Thr Phe Asp Ser Ser Gly 885 890 895

Asn Val Glu Glu Val Cys Arg Pro Arg Thr Arg Met Leu Cys Ser Gln 900 905 910

Asn Thr Tyr Thr Leu Pro Gly Pro Gly Ser Ser Ala Thr Leu Arg Leu 915 920 925

Thr Ala Thr Glu Lys Lys Val Pro Gln Pro Cys Ser Ser Ala Thr Leu 930 935 940

- Asn Arg Leu Thr Val Pro Arg Tyr Ser Ile Pro Thr Gly Asp Pro Pro 945 950 955 960
- Pro Tyr Pro Glu Ile Ala Ser Gln Leu Ala Gln Gly Arg Gly Ala Ala 965 970 975
- Gln Arg Ser Asp Asn Ser Leu Ile His Ala Thr Leu Arg Arg Asn Asn 980 985 990
- Arg Glu Ala Thr Leu Lys Met Ala Gln Leu Ala Asp Ser Pro Arg Ala 995 1000 1005
- Pro Leu Gln Pro Leu Ala Lys Ser Lys Gly Gly Pro Gly Gly Val 1010 1015 1020
- Val Thr Gln Leu Pro Ala Arg Pro Pro Pro Ala Leu Tyr Thr Cys 1025 1030 1035
- Ser Gln Cys Ser Gly Thr Gly Pro Ser Ser Gln Pro Gly Ala Ser 1040 1045 1050
- Leu Ala His Thr Ala Ser Ala Ser Pro Leu Ala Ser Gln Ser Ser 1055 1060 1065
- Tyr Ser Leu Leu Ser Pro Pro Asp Ser Ala Arg Asp Arg Thr Asp 1070 1075 1080
- Tyr Val Asn Ser Ala Phe Thr Glu Asp Glu Ala Leu Ser Gln His 1085 1090 1095
- Cys Gln Leu Glu Lys Pro Leu Arg His Pro Pro Leu Pro Glu Ala 1100 1105 1110
- Ala Val Thr Leu Lys Arg Pro Pro Pro Tyr Gln Trp Asp Pro Met 1115 1120 1125
- Leu Gly Glu Asp Val Trp Val Pro Gln Glu Arg Thr Ala Gln Thr 1130 1140
- Ser Gly Pro Asn Pro Leu Lys Leu Ser Ser Leu Met Leu Ser Gln 1145 1150 1155
- Gly Gln His Leu Asp Val Ser Arg Leu Pro Phe Ile Ser Pro Lys 1160 1165 1170

Ser Pro Ala Ser Pro Thr Ala Thr Phe Gln Thr Gly Tyr Gly Met Gly Val Pro Tyr Pro Gly Ser Tyr Asn Asn Pro Pro Leu Pro Gly Val Gln Ala Pro Cys Ser Pro Lys Asp Ala Leu Ser Pro Thr Gln Phe Ala Gln Glu Pro Ala Val Val Leu Gln Pro Leu Tyr Pro Pro Ser Leu Ser Tyr Cys Thr Leu Pro Pro Met Tyr Pro Gly Ser Ser Thr Cys Ser Ser Leu Gln Leu Pro Pro Val Ala Leu His Pro Trp Ser Ser Tyr Ser Ala Cys Pro Pro Met Gln Asn Pro Gln Gly Thr Leu Pro Pro Lys Pro His Leu Val Val Glu Lys Pro Leu Val Ser Pro Pro Pro Ala Asp Leu Gln Ser His Leu Gly Thr Glu Val Met Val Glu Thr Ala Asp Asn Phe Gln Glu Val Leu Ser Leu Thr Glu Ser Pro Val Pro Gln Arg Thr Glu Lys Phe Gly Lys Lys Asn Arg Lys Arg Leu Asp Ser Arg Ala Glu Glu Gly Ser Val Gln Ala Ile Thr Glu Gly Lys Val Lys Lys Glu Ala Arg Thr Leu Ser Asp Phe Asn Ser Leu Ile Ser Ser Pro His Leu Gly Arg Glu Lys Lys Lys Val Lys Ser Gln Lys Asp Gln Leu Lys Ser Lys Leu Asn

1385

1390

1395

Lys Thr Asn Glu Phe Gln Asp Ser Ser Glu Ser Glu Pro Glu Leu 1405

Phe Ile Ser Gly Asp Glu Leu Met Asn Gln Ser Gln Gly Ser Arg 1415 1420

Lys Gly Trp Lys Ser Lys Arg Ser Pro Arg Ala Ala Gly Glu Leu 1430 1435

Glu Glu Ala Lys Cys Arg Arg Ala Ser Glu Lys Glu Asp Gly Arg 1445 1450

Leu Gly Ser Gln Gly Phe Val Tyr Val Met Ala Asn Lys Gln Pro 1460 1465 1470

Leu Trp Asn Glu Ala Thr Gln Val Tyr Gln Leu Asp Phe Gly Gly 1475 1480 1485

Arg Val Thr Gln Glu Ser Ala Lys Asn Phe Gln Ile Glu Leu Glu 1490 1495

Gly Arg Gln Val Met Gln Phe Gly Arg Ile Asp Gly Ser Ala Tyr 1505 1515

Ile Leu Asp Phe Gln Tyr Pro Phe Ser Ala Val Gln Ala Phe Ala 1520 1525

Val Ala Leu Ala Asn Val Thr Gln Arg Leu Lys 1535 1540

<210> 286

<211> 56 <212> PRT

<213> Homo sapien

<400> 286

Met Gly Asn Gly Ala Thr Gln Lys Gln Leu Pro Asn Leu Arg Asn Asn

Ser Phe Val Val Tyr Phe Leu Val Leu Val Gly Ala Leu Tyr Arg Asp 20 30

Thr Ala Ile Phe Leu Ala Gln Met Ser Leu Leu Glu Ser Thr Val Val

35 40 45

Ile Leu Leu Val Arg Leu Arg Thr

<210> 287

<211> 77

<212> PRT

<213> Homo sapien

<400> 287

Met Leu Leu Ala Val Arg Thr Thr Val Ile Cys Leu Gln Ser Cys Cys

Cys Arg Ile Gln Arg Thr Ala Thr Ile Thr Leu Asn Cys Phe Ala Leu 25

Ser Ser Ile Phe Asp Tyr Tyr Ile Ser His Asn Ile Thr Ile Ser His

Ser Ser Asn Tyr Ser Ala Gln Ile His Glu His Val Pro Ala Arg Ala

Ala Ala Arg Ser Ile Thr Trp Arg Arg Ser Ala Cys Ile 70

<210> 288

<211> 45 <212> PRT <213> Homo sapien

<400> 288

Met Tyr Leu Gly Gln Leu Gly Asn His Arg Leu Lys Lys Leu Thr Leu

Val Ile Thr Arg Val Val Ser Asp Tyr Lys Gln His Ile Ile Asn Pro 20

Thr Ala Leu Ile Leu Ala Gln Arg Gln Asn Trp Thr Phe

<210> 289

<211> 44

<212> PRT

<213> Homo sapien

<400> 289



Met Lys Ala Leu Leu Cys Phe Leu Phe Tyr Ser Asp His Gln Thr Asp 1 5 10 15

Leu Ala Thr Leu Ile Val Lys Asn Glu Pro His Ser Ser Pro Gly Leu 20 25 30

Gly Leu Trp Arg Glu Met Asn Phe Leu Leu Glu Met 35

<210> 290

<211> 50

<212> PRT

<213> Homo sapien

<400> 290

Met Phe Arg Thr Ser Ser Tyr Arg Leu Leu Ile Tyr Lys Val Pro Val 1 5 10 15

Ala Val Thr Pro Thr Arg Lys Thr Trp Asn Cys Lys Gln Ala Gly Val 20 25 30

Thr Ser Val Thr Ser Asp Thr Val Gln Pro Glu Val Arg Phe Leu Phe 35 40 45

Trp Gly

<210> 291

<211> 44

<212> PRT

<213> Homo sapien

<400> 291

Met Ser Gln Trp Pro Val Ala Ser Lys Leu Val Gly Lys Glu Lys Thr 1 5 10 15

Phe Leu Phe Lys Gln Arg Lys Gly Phe Gly Glu Lys Thr Gly Ser Gly 20 25 30

Ser Gly Glu Val Phe Val Met Leu Gly Asp Arg Leu 35 40

<210> 292

<211> 61

<212> PRT

<213> Homo sapien

<400> 292

Met Val His Tyr Arg Lys Glu Lys Lys Thr Ser Val Ser Glu Trp Gln 10

Ile Leu Ile Ile Cys Ser Ser His Leu Phe Ser Ser Glu Asn His Ile 25

Thr Pro Glu Tyr Leu Pro Gly Arg Ile His His Thr Ala Pro Leu Glu

Pro Ala Ser Lys Asp Pro Phe Ala His Ile Val Ile Leu 50 55

<210> 293 <211> 112 <212> PRT <213> Homo sapien

<400> 293

Met Gly Ile Ile Leu Asn Trp Leu Asn Gln Trp Ala Gln Ile Thr Tyr

Leu Pro Ser Leu Leu Cys Asp Ser Pro Ala Val Thr His Thr Ile His

Ile Leu Cys Thr Ser Asn Glu Gln Thr Trp Phe Pro Cys Phe Leu Asp 40

Ile Ser Met Thr Val Ser His Thr Asn Tyr Trp Val Arg Phe Phe Ser 55

Cys Tyr Arg Pro Thr Ser Cys Cys Leu Cys Val Val Leu Gln Lys Leu 70 75

Ser Ile Pro Thr Pro Leu Leu Cys His Leu Gln Glu Ser Gly Ile Val 85 90

Arg Ser Gln Leu Arg Lys Val Leu Val Pro Leu Thr Gly His Ile Leu 100 105

<210> 294 <211> 55 <212> PRT

<213> Homo sapien



216

<400> 294

Met Arg Phe Ile Phe Ile Cys Lys Pro Arg Gly Leu Ile Ile Leu Ile 1 5 10 15

Leu Tyr Glu Tyr Thr Cys Val Leu Gly Lys Ala Phe Ile Gln Gln Met 20 25 30

Pro Thr Thr Tyr Ser Val Pro Arg Pro Arg His Pro Val Thr Ser Trp 35 40 45

Arg Pro Ala Arg Ala Cys Ile 50 55

<210> 295

<211> 77

<212> PRT

<213> Homo sapien

<400> 295

Met Leu Glu Leu Pro Thr Phe Ser Phe Phe Phe Phe Gly Asp Arg Ala 1 5 10 15

Ser Leu Cys His Pro Gly Trp Ser Ala Gly Ala Ser Ser Leu Thr His 20 25 30

Leu Gln Pro Ser Phe Leu Pro Trp Gly Ala Gly Arg Phe Ser Cys Ala 35 40 45

Leu Gln Pro Pro Ser Leu Ala Gly Ile Tyr Arg Ala Leu Leu Gln Val 50 55 60

Ser His Ile Phe Ser Glu Lys Phe Leu Asn Trp Pro Pro 65 70 75